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United States Lobster Market Distribution System Study

Economic and Commercial Analysis
Report No. 74

Fisheries and Oceans
Pêches et Océans

Canada

UNITED STATES LOBSTER MARKET DISTRIBUTION SYSTEM STUDY

Market Analysis Group
Economic and Commercial Analysis Directorate
Department of Fisheries and Oceans
Ottawa, Ontario
K1A 0E6

December, 1990

TAVEL Limited
Dartmouth, Nova Scotia

(Department of Fisheries and Oceans
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Economic and Commercial Analysis
Report 74

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ABSTRACT

This study was commissioned by the Economic and Commercial Analysis Directorate of the Canadian Department of Fisheries and Oceans to obtain a better understanding of our principal market, the United States for lobster products. The focus was on live lobster, however, frozen lobster products are also covered.

The data, comments and conclusions of this study should be considered with the companion study of the United States Lobster Market Consumer Preference Study (ECAR 73).

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RÉSUMÉ

Cette étude a été commandée par la Direction générale de l'analyse économique et commerciale du ministère des Pêches et des Océans du Canada afin de mieux connaître notre principal marché pour les produits du homard, les États-Unis. Cette étude traite non seulement du homard vivant mais aussi des produits congelés du homard.

Les données, commentaires et conclusions tirés de cette étude devraient être examinés conjointement avec l'étude "United States Lobster Market Consumer Preference Study" (ECAR 73).

INTRODUCTION

The development and imposition of national minimum import size legislation for live lobsters by the United States and the resulting discussions between the two countries, and within Canada itself, focussed attention on the need to evaluate the manner in which Canadian lobster products, particularly live lobster, had been marketed in the U.S. This report and its companion one on Consumer Preference, attempt to define the lobster market demand characteristics and the marketing and distribution system, and to briefly outline potential areas for improvement.

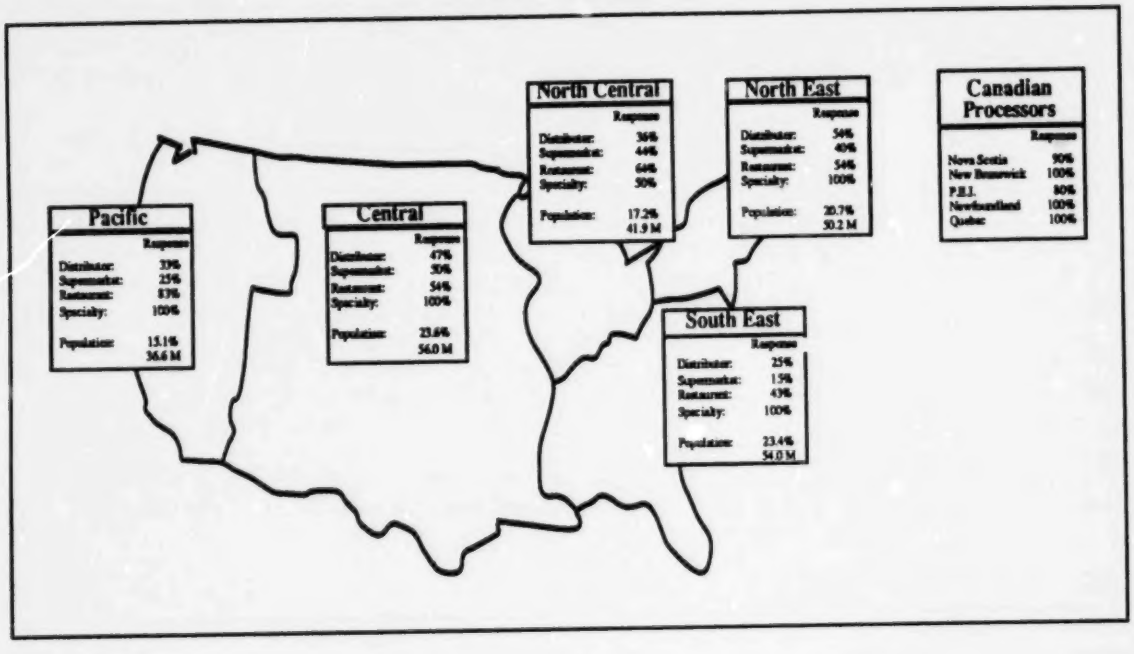
A range of participants from each part of the system were surveyed to gather information on their current activities as well as their opinions on the problems and constraints impeding expansion of sales of lobster.

The U.S. market was surveyed on a regional basis established approximately according to population and geographical area. The degree of response varied with sector and with region of the country as can be seen on the following map.

This study was carried out during the first quarter of 1990 when there was considerable uncertainty within the lobster industry in Canada and New England as to what would happen in the market during the year. The vast majority of those in the distribution, food service and retailing sectors in the U.S. who were surveyed were not aware of the intricacies of the lobster supply situation at the time. Their views, and the survey results, can be considered indicative of the situation prior to the subsequent weakness in shore prices in Canada.

Throughout this report, the word 'Lobster' refers to the species Homarus americanus; that is the species caught in Atlantic Canada and New England. All other lobsters will be referred to by a more definitive name such as "Spiny Lobster" or " Australian Cold Water Tails"

Survey Breakdown



1.0 PROFILE OF THE LOBSTER INDUSTRY

1.1 The Resource

Background:

The lobster fishery is a key component of the Atlantic Canadian fishing industry; representing about 25% of the landed value at the fisherman level, second only to Cod.

With the exception of eight offshore vessels which fish out of Nova Scotia and have a total annual quota of approximately 800 tons (2% of total Atlantic landings), the fishery is carried out by inshore fishermen on small vessels using wooden or steel mesh traps.

The lobster resource could be easily over-exploited with uncontrolled fishing and as a result there is a complex resource management system in place. Overall management and data collection is done by DFO Region (Exhibit 1.1). The grounds are segmented into 40 Lobster Fishing Areas (LFA's) each with advisory committees consisting of fishermen and government representatives. Fishing effort is strictly controlled through:

- limiting the number of fishing licenses
- restricted number of traps per license
- minimum legal lobster size (varies)
- closed seasons
- requiring egg-bearing females be returned to the water

Unlike other fishery management systems (eg: for Cod, Haddock, etc.) lobsters are not controlled by a total annual quota; therefore there is no regulated upper limit on the total quantity of lobster which may be legally landed in any given year.

Long Term Trends:

The historical pattern of lobster landings in the Atlantic fishery is shown in Exhibit 1.2. Only recently have landings recovered to the level of the turn of the century (when the average lobster was much larger) after hitting a low point in the early 1970's. The landings history for the two key components of the fishery, the Southern Gulf and Scotia-Fundy, are shown separately. It can be seen that both areas are contributing to the overall recovery.

Lobster fishing seasons in Atlantic Canada

District number	Open Season
3	April 20th to July 15th
4	April 20th to July 15th
5	April 20th to July 15th
6	April 20th to July 15th
7	April 20th to July 15th
8	April 20th to July 15th
9	April 20th to June 30th
10	April 20th to June 30th
11	April 20th to June 30th
12	April 20th to June 30th
13	April 20th to July 5th
14	May 5th to July 10th
15	June 1st to August 12th
16	May 20th to August 10th
17	June 5th to August 5th
18	May 20th to July 31st
19	May 9th to July 9th
20a	May 1st to June 30th
20b	May 8th to July 7th
21	May 9th to July 9th
22	May 1st to June 30th
23	May 9th to July 9th
24	May 1st to June 30th
25	August 10th to October 10th
26	May 1st to June 30th
27	May 16th to July 15th
28	May 10th to July 9th
29	May 1st to June 30th
30	May 20th to July 20th
31	April 20th to June 20th
32	April 20th to June 20th
33	Last Tuesday in November to May 31st
34	Last Tuesday in November to May 31st
35	—March 1st to July 31st —October 15th to December 31st
36	—April 1st to June 29th —2nd Wednesday in November to January 14th
38	Second Wednesday in November to Fourth Thursday in June
40	Area closed to inshore offshore lobster fishing
41	Area opened all year

Note: Minimum size of lobster varies by district.

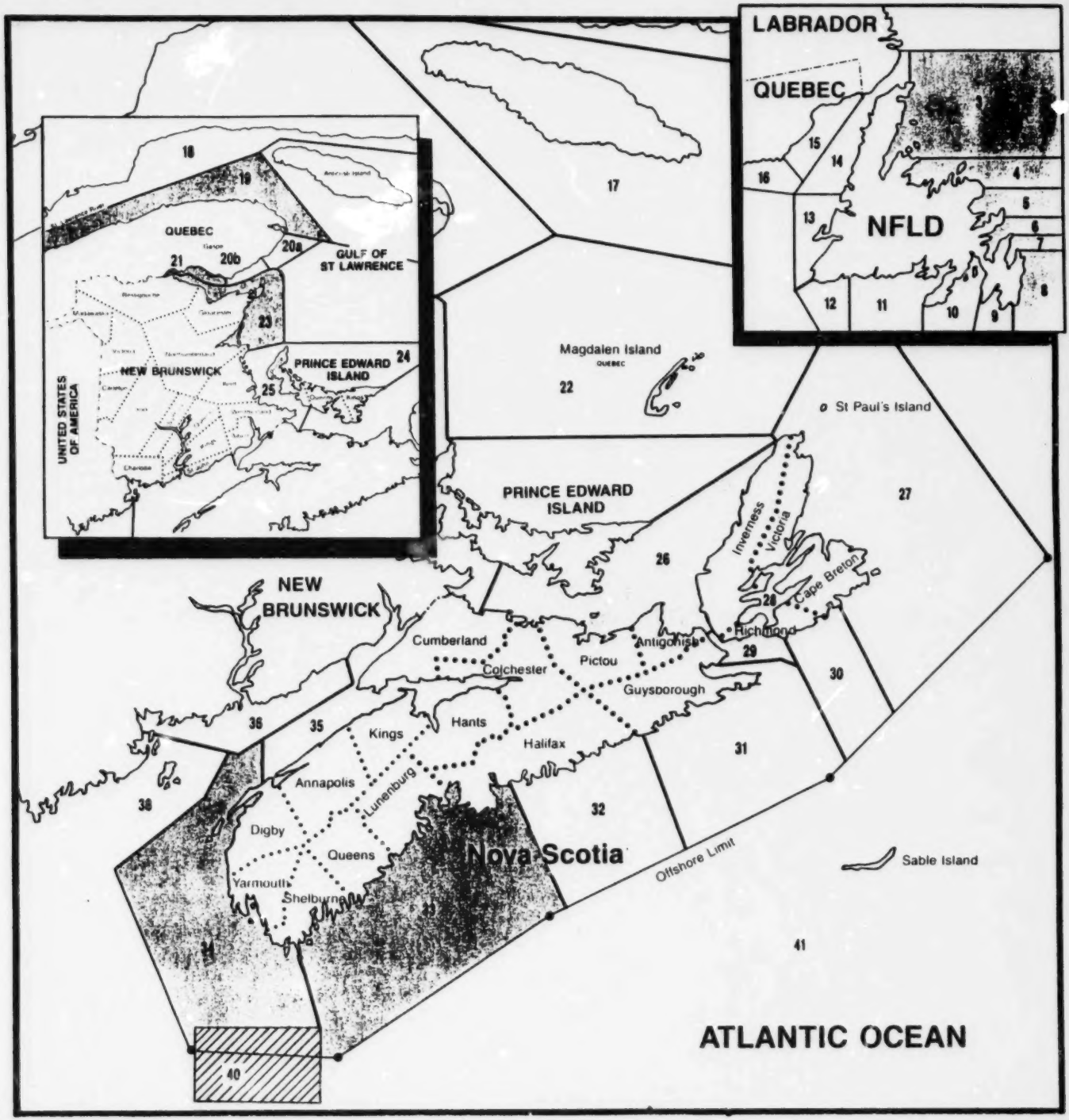
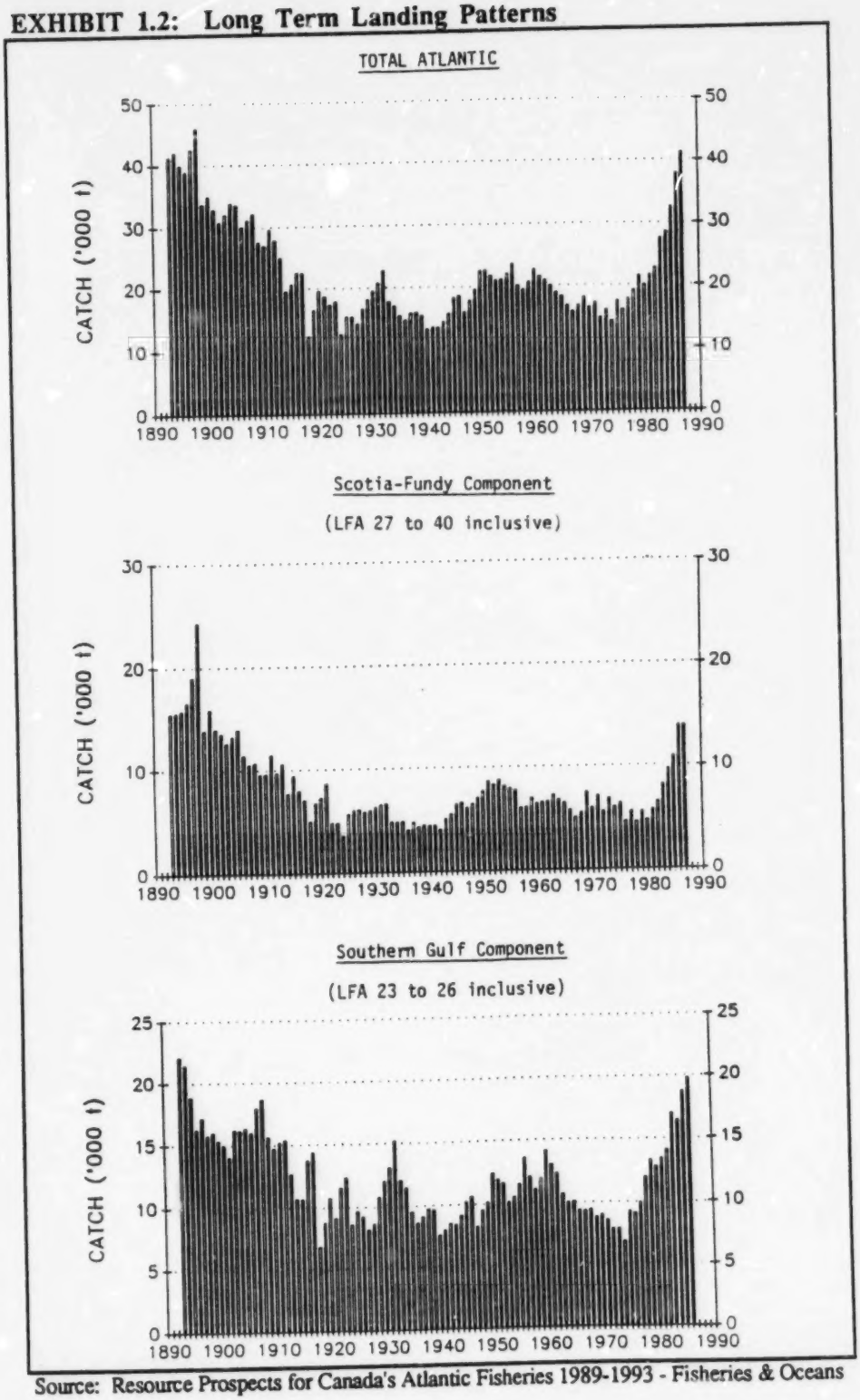


EXHIBIT 1.2: Long Term Landing Patterns



Source: Resource Prospects for Canada's Atlantic Fisheries 1989-1993 - Fisheries & Oceans

Recent Trends:

Landings, landed values and average prices in each of the regions during the last five years are shown in Exhibit 1.3.

Regional Characteristics:

The two critical factors defining the variations between the different Regions are the seasonality profile of landings and the size mix of lobster from each area. These differences have a very significant bearing on the market opportunities available and the types of processing done in each Region.

Exhibit 1.4 illustrates the monthly landings profile for each Region during 1988 and 1989. The annual peak in landings during the spring and early summer time period is clearly shown.

It can be seen that Scotia Fundy is dominated by the market size lobster and has two peak landing seasons of approximately equal volume; late spring/early summer and late fall/early winter.

The Gulf Region fishery is the reverse of Scotia Fundy in that about 75% of the landings are in the canner category. The greatest volume of landings is in the spring fishery; followed by a much smaller peak in the fall.

Annual landings in the Newfoundland and Quebec fisheries are significantly lower; both fisheries occurring in the spring/early summer time period.

Although there are distinct differences between regions, the pattern in each region is very consistent from year to year.

The variations in the size mix from the different regions was illustrated in terms of the major categories of canner, market and jumbo in Exhibit 1.3 . Exhibit 1.5 is a more detailed picture of the variations in size frequency in the different areas. (It should be noted that these graphs were derived from various data sources and are intended for illustration purposes only; they are not scientifically 'valid'.)

1.2 The Processing Industry

The seasonality and lobster size characteristics, and the total volume of landings determine the type and variation of lobster processing facilities found in each region. Exhibit 1.6 illustrates these differences by showing the number of companies in each region stating they carried out each of the three major types of processing.

Lobsters represent approximately 25% of the total landed value of the Atlantic fishery. They differ from other species types (eg: groundfish) however, in that on an overall basis much less value is added at the processing level. This is because such a high proportion is sold in the live form or with only limited processing (eg: lobster in brine). As a result lobster represents only 15% of the product value of the fishery. This is not necessarily a bad situation; unlike other seafood products lobster has a ready market in the live and whole form. Further processing of lobsters into various meat products primarily evolved as a means of converting small, weak, summer caught lobsters into some form of non-perishable consumer product. Ongoing profitability is the only accurate measure of whether an appropriate level of value added production is taking place.

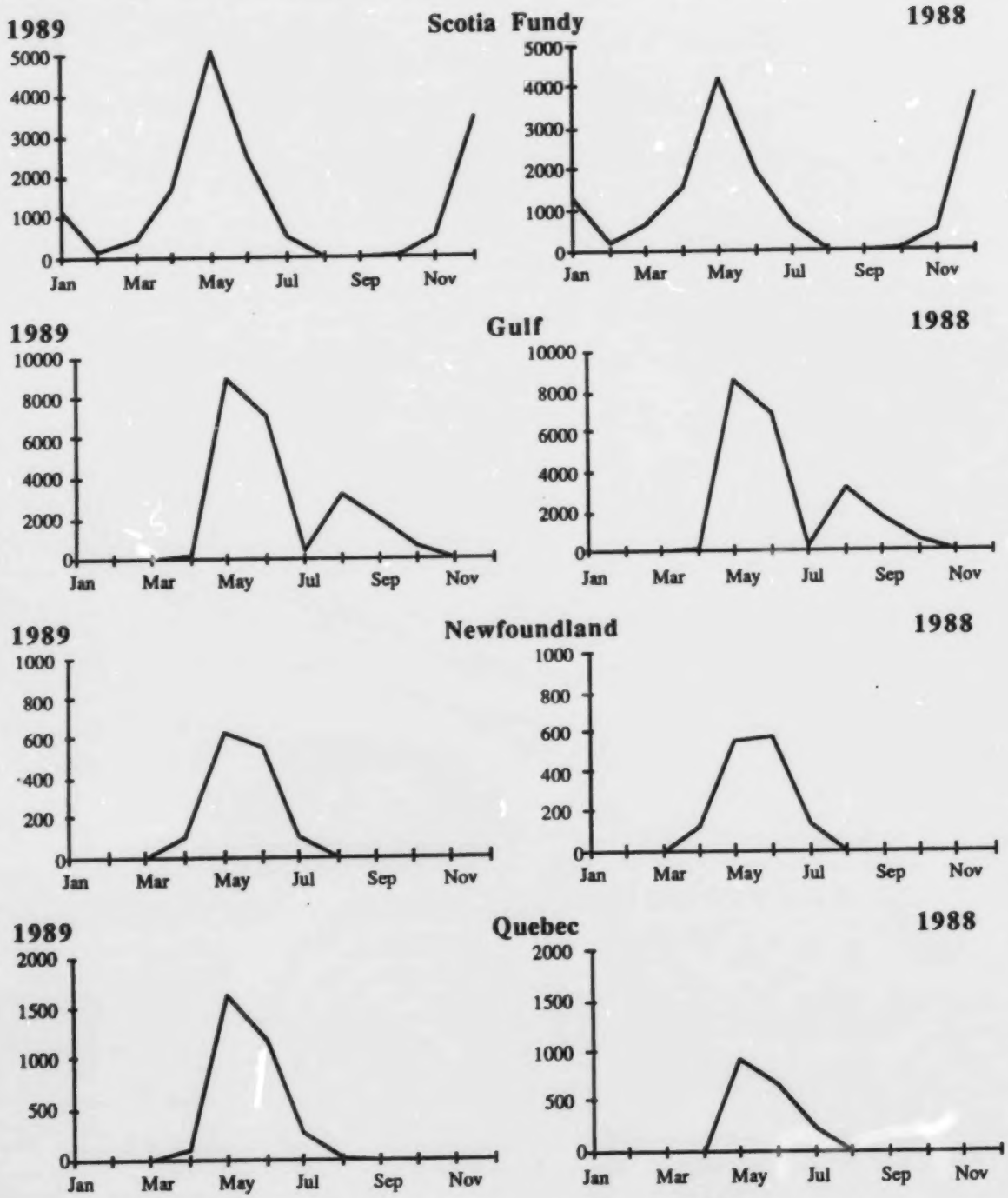
EXHIBIT 1.3: Historical Landings And Values - Atlantic Canada

Region	Size	1989 Landings (MT)	1989 Value (000 $)	1989 Value ($/lb)	1988 Landings (MT)	1988 Value (000 $)	1988 Value ($/lb)	1987 Landings (MT)	1987 Value (000 $)	1987 Value ($/lb)	1986 Landings (MT)	1986 Value (000 $)	1986 Value ($/lb)	1985 Landings (MT)	1985 Value (000 $)	1985 Value ($/lb)
Scotia Fundy	Canner	1646	8320	2.29	1480	8247	2.53	1117	6386	2.59	939	4452	2.15	607	2881	2.15
	Market	13855	110978	3.63	13228	112125	3.84	13584	132324	4.42	13111	116232	4.02	10232	82100	3.64
	Jumbo	27	249	4.18	25	246	4.46	24	245	4.63	46	388	3.83	28	193	3.13
	Unspec.			0.00			0.00			0.00			0.00	1	9	4.08
	Total	15528	119547	3.49	14733	120618	3.71	14725	138955	4.28	14096	121072	3.90	10868	85183	3.56
Gulf	Canner	16217	72576	2.03	15472	77092	2.26	14730	73329	2.26	14033	59867	1.94	13122	50928	1.76
	Market	5998	34466	2.61	5947	38366	2.93	5646	39517	3.17	5385	32882	2.77	4854	26807	2.51
	Jumbo			0.00			0.00			0.00			0.00			0.00
	Unspec.			0.00	9	50	2.52	2	10	2.27	73	346	2.15			0.00
	Total	22215	107042	2.19	21428	115508	2.45	20378	112856	2.51	19491	93095	2.17	17976	77735	1.96
Quebec	Canner	819	4657	2.58	574	3787	2.99	417	2897	3.15	276	1290	2.12	268	1224	2.08
	Market	2163	12768	2.68	1753	11998	3.10	2079	14340	3.13	1887	11637	2.80	1627	8890	2.48
	Jumbo	1	4	3.27	1	5	2.89	14	91	2.90	1	8	2.79	9	43	2.27
	Unspec.	220	1368	2.82	204	1389	3.09	148	1020	3.12	105	636	2.76	234	1276	2.47
	Total	3203	18797	2.66	2532	17179	3.08	2659	18348	3.13	2268	13571	2.71	2137	11433	2.43
Newfoundland	Canner			0.00			0.00			0.00			0.00			0.00
	Market			0.00			0.00			0.00			0.00			0.00
	Jumbo			0.00			0.00			0.00			0.00			0.00
	Unspec.	1368	8071	2.68	1348	7956	2.68	1198	8321	3.15	1365	8491	2.82	1519	9349	2.79
	Total	1368	8071	2.68	1348	7956	2.68	1198	8321	3.15	1365	8491	2.82	1519	9349	2.79
Atlantic	Canner	18682	85553	2.08	17526	89126	2.31	16264	82612	2.30	15248	65609	1.95	13997	55033	1.78
	Market	22016	158212	3.26	20928	162489	3.52	21309	186181	3.96	20383	160751	3.58	16713	117797	3.20
	Jumbo	28	253	4.17	26	251	4.41	38	336	3.98	47	396	3.80	37	236	2.93
	Unspec.	1588	9439	2.70	1560	9395	2.73	1348	9352	3.15	1543	9473	2.79	1754	10634	2.75
Total All Regions		42314	253457	2.72	40040	261261	2.96	38959	278481	3.24	37220	236229	2.88	32500	183700	2.56

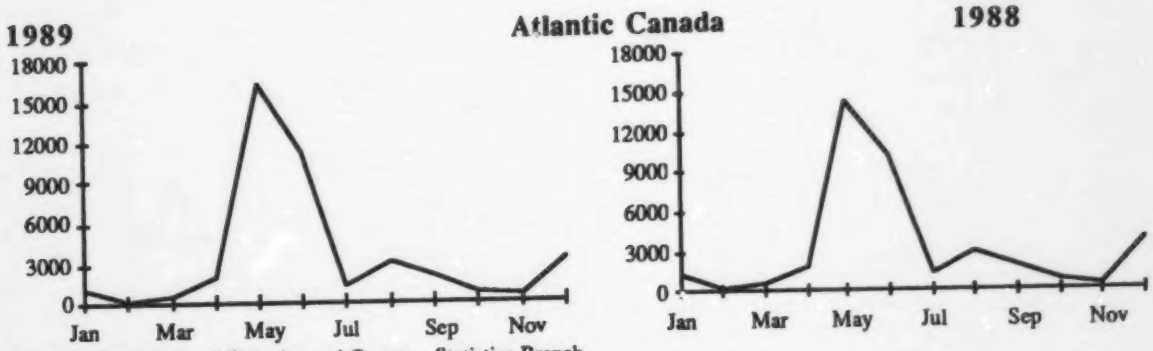
Notes :

1. 1985 Gulf estimated from Atlantic total
2. 1989 Gulf estimated
3. All 1989 figures preliminary

EXHIBIT 1.4 : Monthly Landings - Lobster In Atlantic Canada (MT)



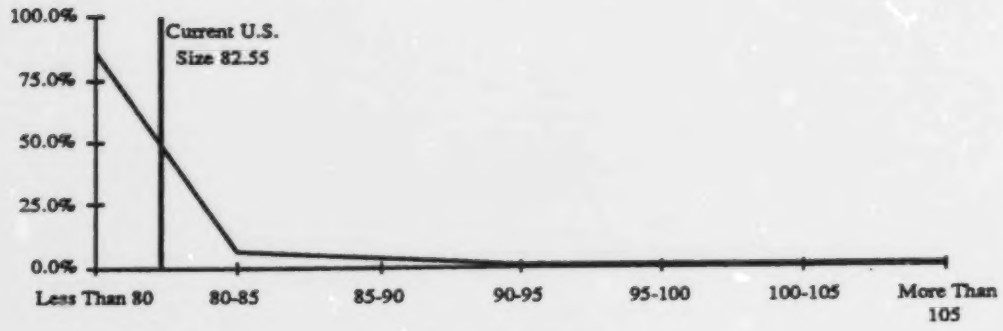
Atlantic Canada



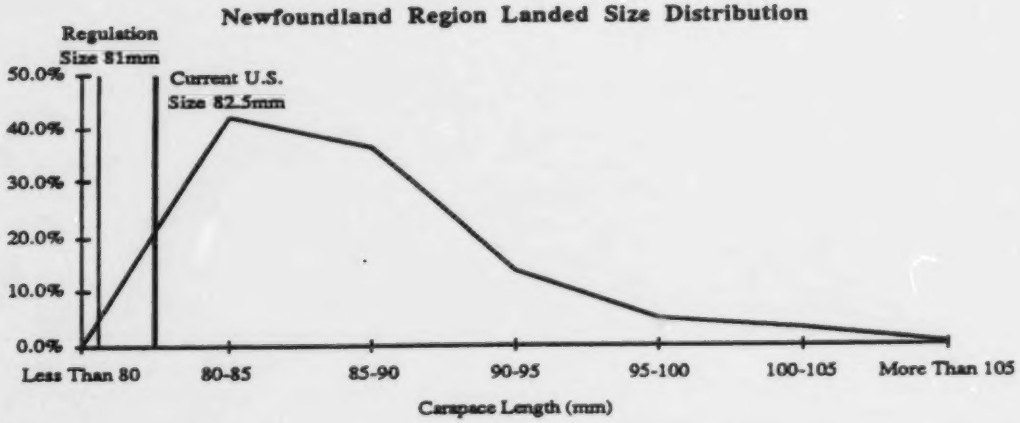
Source : Department of Fisheries and Oceans - Statistics Branch

EXHIBIT 1.5: Landed Size Distribution By Region

Gulf Region Landed Size Distribution



Newfoundland Region Landed Size Distribution



Scotia Fundy Region Landed Size Distribution

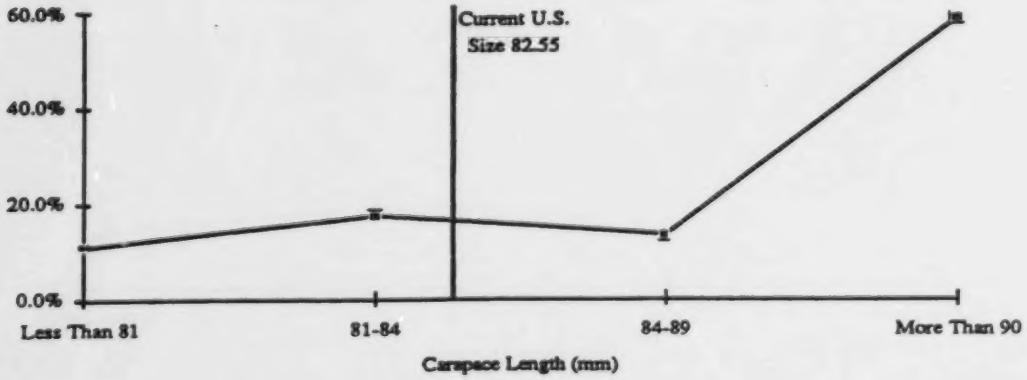


EXHIBIT 1.6 : Number Of Processing Facilities Handling Lobster

Region	Live	Frozen	Canned
Scotia-Fundy	109	6	-
Gulf	48	17	14
Quebec	40	-	-
Newfoundland	54	2	1

Source : Department of Fisheries and Oceans - Statistics Branch
Notes: (1) Some plants will be included in more than one category.
(2) 1988 data.
(3) Some of these facilities would be merely buying stations, rather than "plants", although all would be registered with DFO.

The significantly higher percentage of market size lobsters in the overall catch plus the 'second' winter fishery has allowed processors in Scotia-Fundy to concentrate on the live lobster market, whereas companies in the other major area, the Gulf Region, have had to become more diversified. Packers in Quebec and Newfoundland have not in general invested in processing facilities; they either sell live lobsters directly to customers or to other companies in the other regions.

Over the years a mutually supportive arrangement has developed between Canadian and New England live lobster dealers. Even though they are primarily competitors in the final analysis, the mutual use of pounds enables companies in both countries to buy and sell lobsters in order to balance their seasonal supplies with the fluctuations in market demand throughout the year. Many of these relationships are long standing and provide a greater degree of stability than would otherwise be the case.

1.3 Markets

The United States is the dominant market for Canadian lobster products; taking approximately 70% of total export value in 1988 and 1989 (Exhibits 1.7 and 1.8).

Although remaining by far the most significant market overall for Canadian lobster products, the U.S. market share is slipping. Exhibit 1.8 illustrates how Canadian exports to the U.S. have levelled off while those to Europe and Japan, in particular, were steadily growing until the period of general market weakness illustrated by the 1989 export sales.

The remainder of this report will focus on the U.S. market.

EXHIBIT 1.7: Market Destination - Canadian Lobster Products (1988 Product Value - Cdn $'000 F.O.B. Plant)

Product		U.S.	Japan	France	Europe Other	Other	Total
Live		145,687	7,134	9,913	27,690	2,631	193,055
Cooked:	Fresh in Shell	3,727	449	375	251	3	4,805
	Fresh Meat	5,613	-	41	361	-	6,015
	Frozen in Shell	18,763	7,603	4,178	2,366	323	33,233
	Frozen in Brine	869	7,142	16,405	10,329	107	34,852
	Frozen Meat	42,433	479	1,770	1,960	126	46,768
	Canned (Hot Packed)	16,767	454	378	783	3	18,385
	Other	2,181	228	208	187	2	2,806
Totals ($ '000)		**236,040**	**23,489**	**33,268**	**43,927**	**3,195**	**339,919**
%		**69%**	**7%**	**10%**	**13%**	**1%**	

Source: Statistics Canada - Fisheries and Oceans

EXHIBIT 1.8: Export Market Trends (Product Value - Cdn $'000 - F.O.B. Plant)

		1986	1987	1988	1989
United States		217,674	236,449	236,040	201,107
Japan		8,656	19,148	23,489	14,862
Europe:	France	14,273	20,523	32,890	29,280
	Other	29,850	36,969	44,305	40,578
Other		850	1,770	3,195	1,708
Total $'000		**271,303**	**314,859**	**339,919**	**287,535**

Source: Statistics Canada - Fisheries and Oceans

1.4 Current Issues

There are a number of factors which are directly impacting on the current (May 1990) status of the Atlantic Canadian lobster fishery:

- an apparent weakening of final consumer demand for lobster in the U.S. during 1989 resulting in sluggish sales.
- excessive inventories of 1989 frozen product, both canned and brine, had a serious "overhang effect" on the prospects for 1990 prices.

- a generally weak financial situation throughout the fishing and processing sectors left limited flexibility for many in the industry to respond to any crisis situation in lobster markets.
- a strong Canadian dollar and high interest rates affecting the potential profitability of lobster fishermen, shippers and processors.
- passage by U.S. Congress of the law prohibiting importation of live lobsters with a carapace size smaller than 3.25 inches (see Appendix 5 for U.S. federal and state regulations)
- Canada's challenge of the U.S. minimum size legislation to the FTA panel has been overruled.
- increasing Canadian lobster landings and, more importantly, the general expectation that this trend will continue in the future.
- current (May 1990) record low prices at the wharf level.
- ongoing discussions about the merits of Canada increasing the minimum legal size of lobsters in Scotia-Fundy and in the Gulf, and statements by some Gulf fishermen groups that they intend to voluntarily respect a larger minimum size

2.0 OVERVIEW OF THE U.S. LOBSTER MARKET

2.1 Shellfish Market - Supply Trends

Two significant trends have occurred on the supply side of the U.S. shellfish market during the last decade. These are clearly shown in Exhibit 2.1. One factor has been the continuing increase in shrimp (the dominant shellfish) consumption, primarily resulting from the explosion in international aquaculture. The other major factor has been the rapid fall in King Crab supplies due to over fishing in Alaska. Supplies of spiny lobster and snow crab have remained relatively stable or declined slightly over the same time period. Lobster and scallop supplies have steadily increased throughout the decade.

Analog products made from surimi are not considered to be directly in the shellfish market segment. Their sales have grown dramatically over the last decade and since most of these products are marketed as shellfish look-a-likes and substitutes they have had some competitive impact at the low price/high volume end of the traditional shellfish market during this time period as well.

2.2 Lobster Supply

The total supply of American Lobster, in all its product forms, has been steadily increasing at an average rate in excess of six million pounds (live weight) per year since 1980 (Exhibit 2.1). U.S. domestic landings have only slightly increased during this period and imports of canned lobster meat decreased drastically in the early 1980's and have remained low ever since. As can be seen in Exhibit 2.2, the total supply increase has come from imports of fresh and frozen lobster products, all from Canada.

2.3 Price Trends

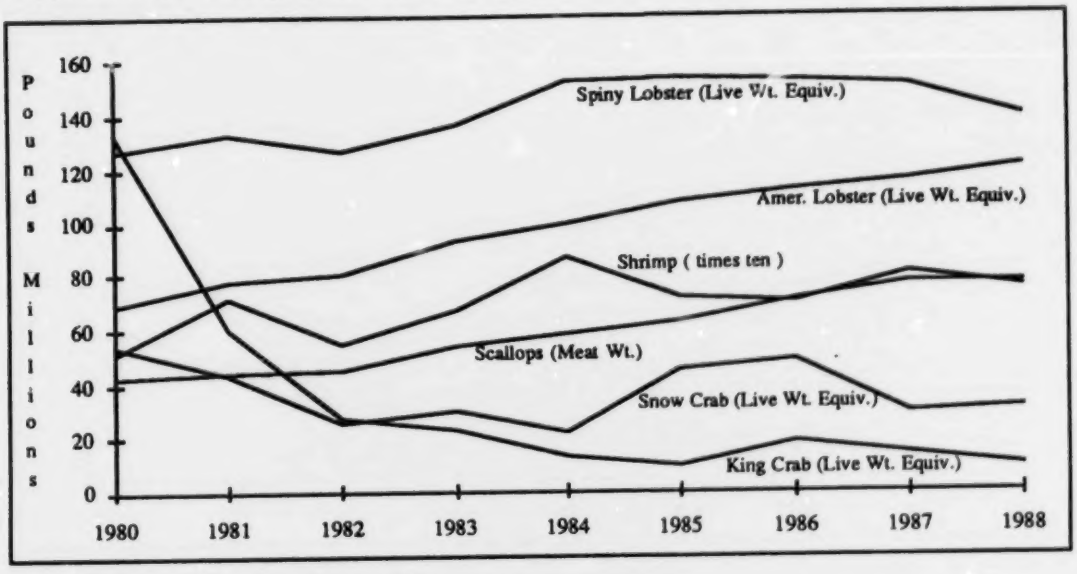
Shellfish prices, as illustrated by U.S. ex-vessel prices have remained relatively stable over the long term (Exhibit 2.3). The only exceptions are the steady increase in King Crab prices due to the resource scarcity problem and the steady increase in American lobster prices. Average Canadian ex-vessel prices have been included for illustration purposes. Although it seems to fluctuate more from year to year the Canadian average ex-vessel price does tend to move in parallel with the U.S. price, which is to be expected.

2.4 Recent Market Behavior

As with any market, there are a variety of ongoing factors which influence the supply/demand equilibrium for Canadian lobster in the U.S.. The resulting fluctuations in prices are a normally expected element of the business.

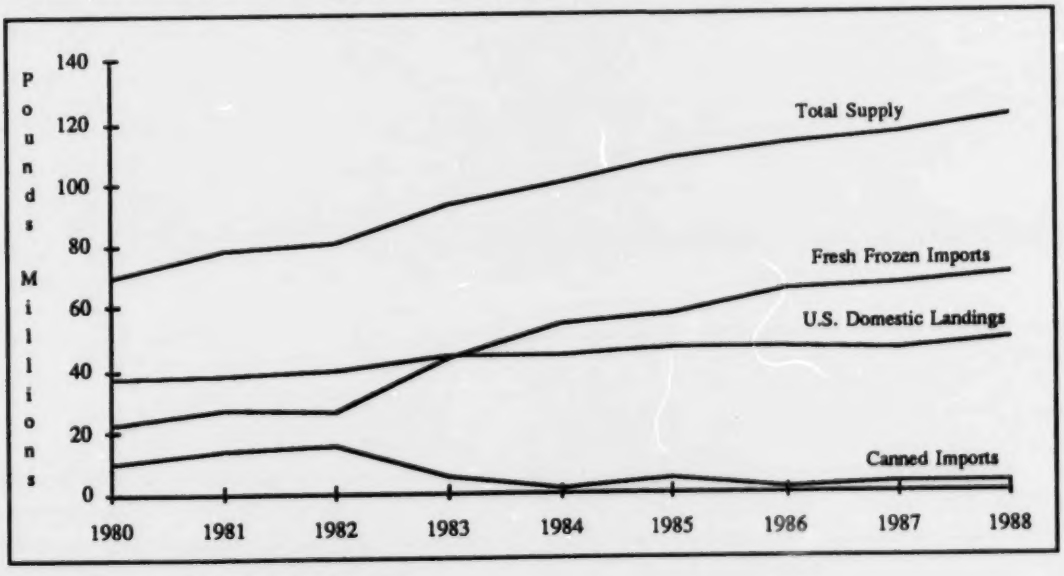
The first quarter of 1990 was an unusually unstable period in the U.S. lobster market however. The combination of excessive 1989 inventories of frozen canned and brine lobsters, an apparently

EXHIBIT 2.1 : Trends Of U.S. Shellfish - Net Supply



Source : Fisheries of the United States - 1988
Note : Shrimp supply presented is divided by ten for ease of presentation.

EXHIBIT 2.2 : U.S. Supply - American Lobster (Equivalent Live Weight)



Source : Fisheries of the United States - 1988

EXHIBIT 2.3: U.S. Ex-Vessel Price Trends (U.S. $/lb)

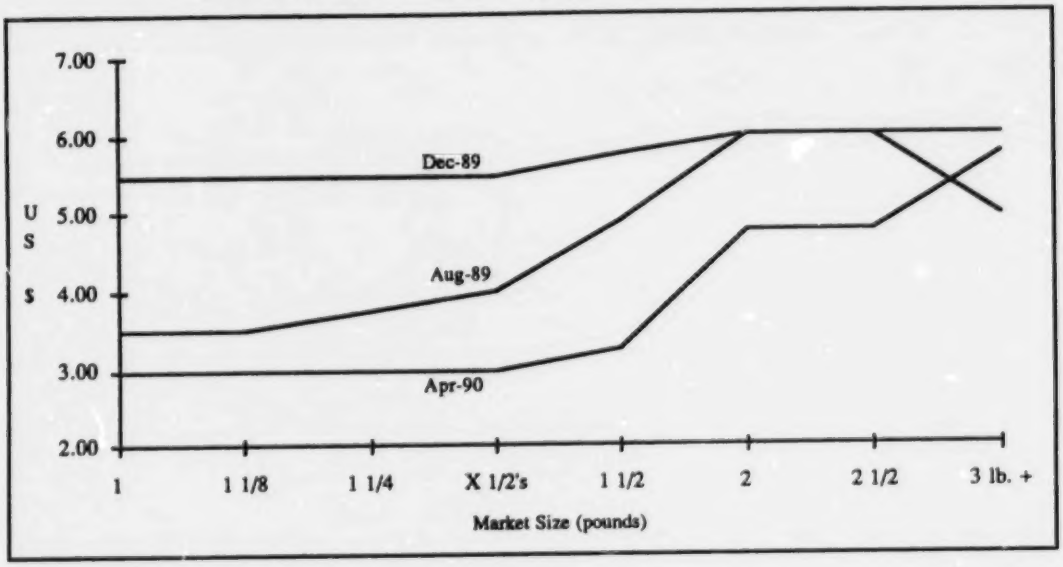
Years	*Lobster Cdn $/lb Landed*	Lobster		Crab		Scallops		Shrimp
		American	Spiny	King	Snow	Calico	Sea	Gulf
1988	*2.97*	2.99	3.21	4.01	0.94	1.05	4.20	1.84
1987	*3.39*	2.93	3.70	3.40	0.87	1.09	4.13	1.82
1986	*2.87*	2.62	2.84	3.38	0.76	1.91	4.87	1.85
1985	*2.68*	2.49	2.69	2.62	0.60	1.00	4.71	1.52
1984	*2.42*	2.60	2.74	2.34	0.71	0.55	5.30	1.73
1983	*2.32*	2.43	2.63	2.65	0.88	1.25	5.45	2.10
1982	*N/A*	2.31	2.51	2.91	1.06	1.03	3.66	2.03

Source: U.S. Department of Commerce and DFO Statistics

increasing lack of final consumer interest in lobster throughout the U.S., the confusion and instability created by the new U.S. minimum size legislation, the generally weak financial condition of many companies in the Canadian fishery and the prospect of the continuing long term trend of increased landings, resulted in the rapid weakening of live lobster prices, primarily in the smaller sizes. This price decline was predicted by some to occur with the opening of the winter fishery in Scotia-Fundy in November, 1989, but, although catch rates were high the overall catch was down due to unusually bad weather, and the onset of the real market weakness was delayed until spring.

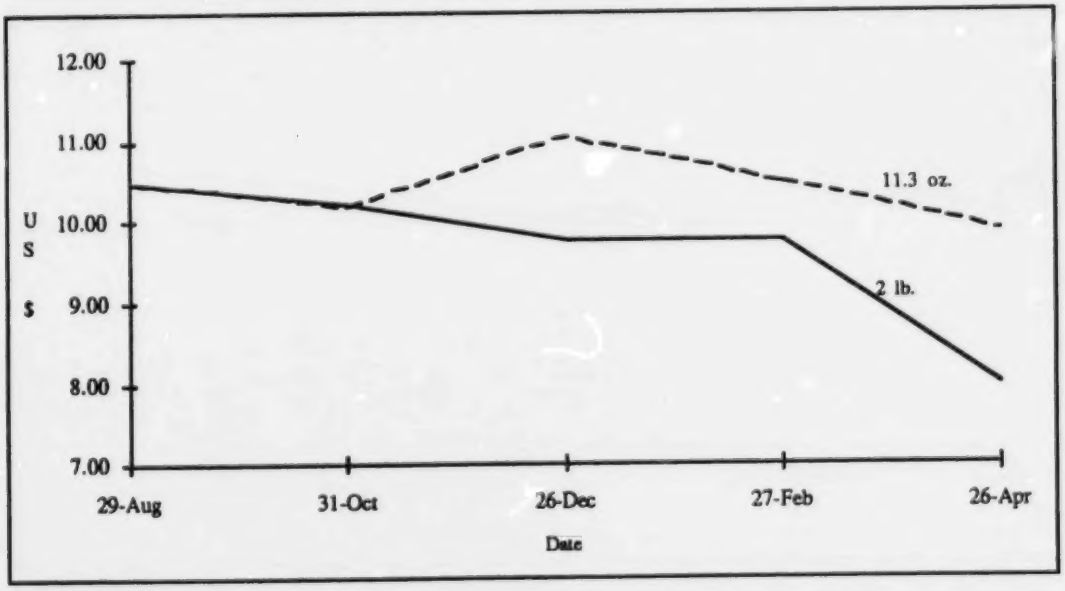
Exhibits 2.4 and 2.5 illustrate these trends although the actual prices shown should be treated with caution since they were derived from a published market newsletter.

EXHIBIT 2.4 : Changes In Primary Importer's Selling Price By Season And Size For Live Lobster ($/lb)



Source : Seafood Price Current- mid month prices

EXHIBIT 2.5 : Changes In Primary Importer's Selling Price By Can Size For Frozen Meat ($/lb)



Source : Seafood Price Current

2.5 Minimum Size Regulations

Various states have had differing regulations concerning the minimum allowable lobster size for many years. Effective in January, 1990, the U.S., for the first time, enacted federal legislation as well. Appendix 5 lists the current status of these regulations.

In general, any differences between Canadian and U.S. regulations complicate the marketing and distribution process for the industries of both countries. Such complications lead to added costs in culling on-board vessels, sorting in the plant, and in selling and shipping. This incremental cost, which must be absorbed within the system somewhere would, theoretically at least, result in some combination of reduced consumption due to higher prices and/or lower profits for all sectors of the industry.

From the standpoint of the logistics of the distribution of live lobster, the introduction of the federal legislation eliminates the previous complication of dealing with the various state laws. From the marketing perspective, however, it eliminates the opportunity to sell, anywhere in the U.S., live lobsters less than 3.25" carapace length. This affects not only the smaller Canadian Gulf lobsters but also those lobsters from the Scotia-Fundy Region between the Canadian legal size of 81 mm (3 3/16") and the U.S. legal size.

3.0 EXISTING DISTRIBUTION SYSTEM

3.1 Live Lobster

Live lobster is the most significant lobster product form in terms of export value and in the complexity of the distribution system required to deliver it to market.

3.1.1 Routings and Destinations

The three key markets for Canadian live lobster are the U.S., Western Europe and Japan. Exhibit 3.1 illustrates the relative volumes in 1989 and the relative significance of each of the major points of export from Canada for each market. All shipments from Halifax, Moncton, Toronto and Montreal are by air; those remaining being by truck. With respect to the U.S. market, the three most important exit points are St. Stephen, Yarmouth and, to a lesser extent, Woodstock.

Live lobster were, of course, shipped in limited quantities to other countries, and through other exit points such as Vancouver, but the value of these exports is negligible and they were not included in this study.

A more detailed breakdown of the origin, routing and destination of live lobster shipments is given in Exhibit 3.2. It should be noted that the provinces of origin are those shown on the Canada Customs export documents which may or may not reflect the 'true' origin of the lobsters. The data should be largely representative however.

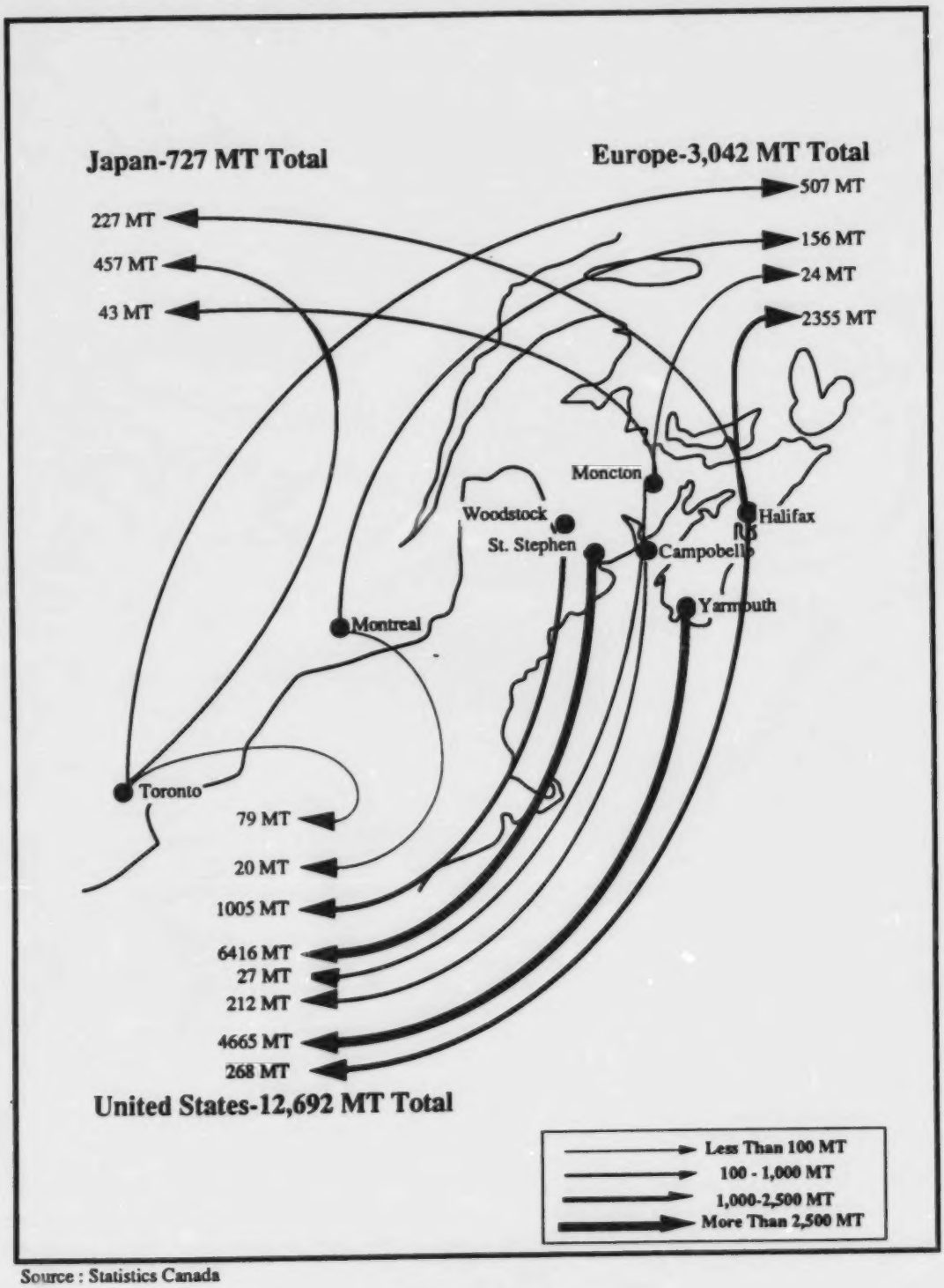
Almost all live lobsters from P.E.I., Newfoundland and Quebec enter the U.S. by truck through Woodstock or St. Stephen. A small amount from Quebec also enter at a variety of border crossings in Quebec. A comparison of the annual totals for 1987, 1988 and 1989 indicates that the quantities shipped through the various points have not changed very much, although Woodstock seems to be declining somewhat, and air shipments for all markets seem to be becoming more focused on Halifax and Montreal.

Exhibit 3.3 details and Exhibit 3.4 illustrates graphically the specific destination states for live lobsters shipped from each of the provinces over the last three years. This clearly shows how Massachusetts and Maine are the key initial markets. Taking into consideration the year to year fluctuations in the lobster catches, market demand and prices, and so on; with few exceptions there has been a great deal of consistency in distribution. There does not appear to have been much change in customer location or shipping routes over the last three years.

There is no particularly diverse pattern of air shipment of live lobster to the U.S. market; Halifax to California seems to be the most consistently significant.

The concentration of market destinations in the northeast U.S. is clearly shown for the three key truck exit points, St. Stephen, Yarmouth and Woodstock.

EXHIBIT 3.1 : Destination of live lobster exports - 1989



Source : Statistics Canada

EXHIBIT 3.2: Major Market Estinations - Live Lobster Shipments (MT)

1989

From:	N.S.			N.B.			P.E.I.			Quebec		Nfld.
Destination	**U.S.**	**Europe**	**Japan**	**U.S.**	**Europe**	**Japan**	**U.S.**	**Europe**	**Japan**	**U.S.**	**Europe**	**U.S.**
Exit Point												
Halifax	247	1,911	179	-	420	36	21	3	12	-	21	-
Yarmouth	4,665	-	-	-	-	-	-	-	-	-	-	-
Woodstock	309	-	-	71	-	-	286	-	-	220	-	119
St. Stephen	3,334	-	-	2,560	-	-	158	-	-	127	-	237
Moncton	3	-	-	24	24	43	-	-	-	-	-	-
Campobello	-	-	-	212	-	-	-	-	-	-	-	-
Montreal*	4	70	-	1	34	-	-	-	-	15	52	-
Toronto	79	504	454	-	3	3	-	-	-	-	-	-
Totals	**8,641**	**2,485**	**633**	**2,868**	**481**	**82**	**465**	**3**	**12**	**362**	**73**	**356**

TOTALS (All Provinces)

	1989			1988			1987		
Destination	**U.S.**	**Europe**	**Japan**	**U.S.**	**Europe**	**Japan**	**U.S.**	**Europe**	**Japan**
Exit Point									
Halifax	268	2,355	227	234	2,297	86	229	1,729	74
Yarmouth	4,665	-	-	6,098	-	-	4,469	23	-
Woodstock	1,005	-	-	1,346	-	-	1,451	-	48
St. Stephen	6,416	-	-	6,215	-	-	6,550	-	-
Moncton	27	24	43	26	55	2	27	39	19
Campobello	212	-	-	205	-	-	177	-	-
Montreal*	20	156	-	8	234	-	244	103	-
Toronto	79	507	457	86	487	341	6	312	335
Totals	**12,692**	**3,042**	**727**	**14,218**	**3,073**	**429**	**13,153**	**2,206**	**476**

Source: Statistics Canada

*Dorval & Mirabel

EXHIBIT 3.3: U.S. Destinations - Live Lobster Shipments (MT)

From: / To:	Nova Scotia			New Brunswick			P.E.I.			Quebec			Newfoundland		
	'89	'88	'87	'89	'88	'87	'89	'88	'87	'89	'88	'87	'89	'88	'87
California	311	139	107	34	6	1	-	-	3	15	6	14	-	-	1
Connecticut	194	168	231	431	531	286	-	-	-	-	-	-	-	-	-
Florida	17	60	72	8	12	21	-	-	-	-	-	-	-	-	3
Hawaii	15	-	7	3	-	-	-	-	1	-	-	-	-	-	-
Illinois	6	20	13	-	22	-	3	-	-	-	-	-	-	-	-
Maine	2,457	2,419	1,362	1,124	1,070	1,195	315	402	460	109	122	146	148	135	90
Massachusetts	4,209	4,992	4,499	1,077	1,230	1,181	33	156	181	224	224	379	199	201	205
New Hampshire	156	172	246	68	111	137	37	42	-	-	6	2	-	1	-
New Jersey	273	164	40	15	22	31	34	37	21	5	-	-	5	-	-
New York	739	1,499	782	95	173	207	19	3	7	8	19	5	4	12	-
Rhode Island	210	92	135	1	9	19	-	-	-	-	-	17	-	-	-

Source: Statistics Canada

EXHIBIT 3.4 : Destination of live lobster shipments from points of exit

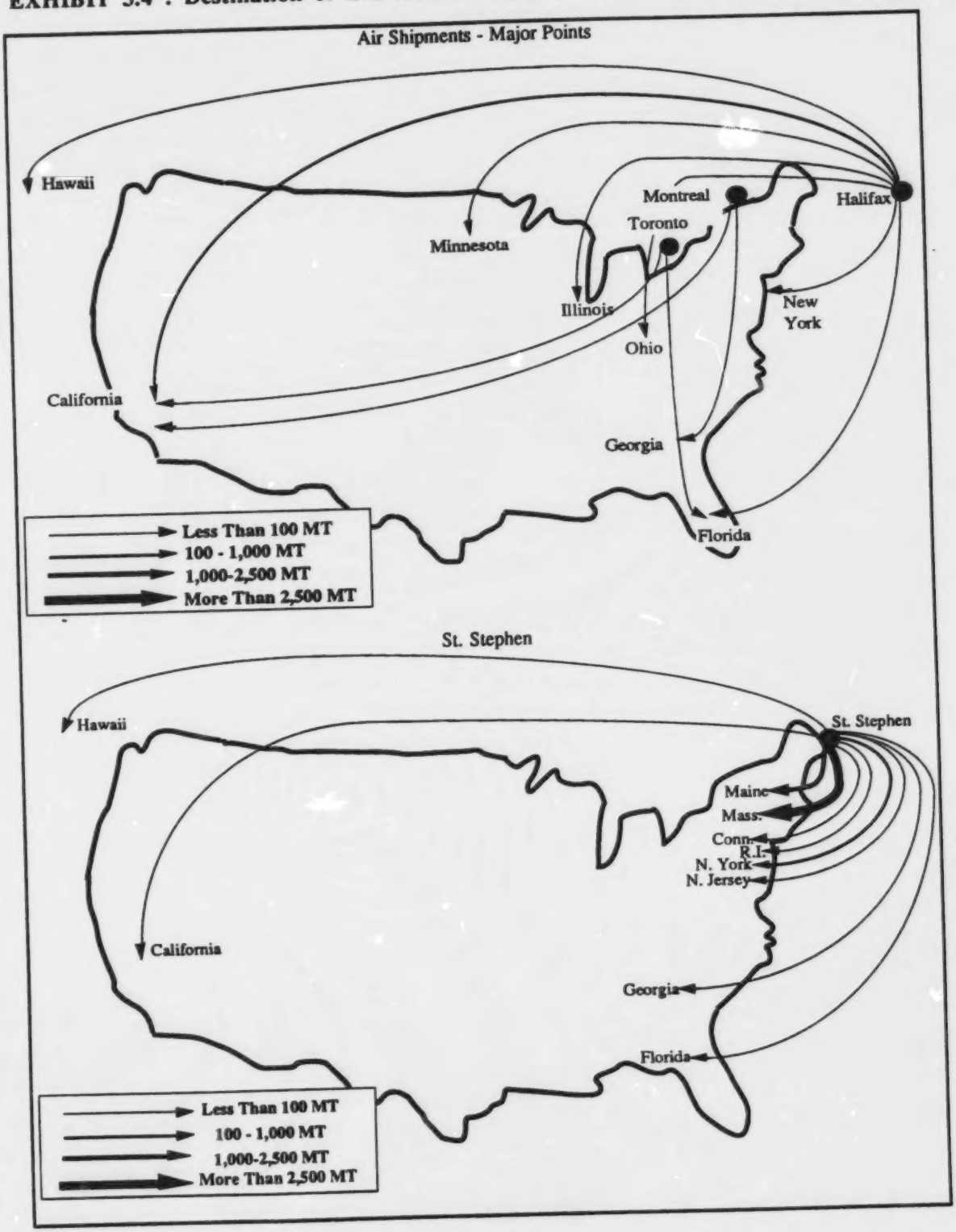
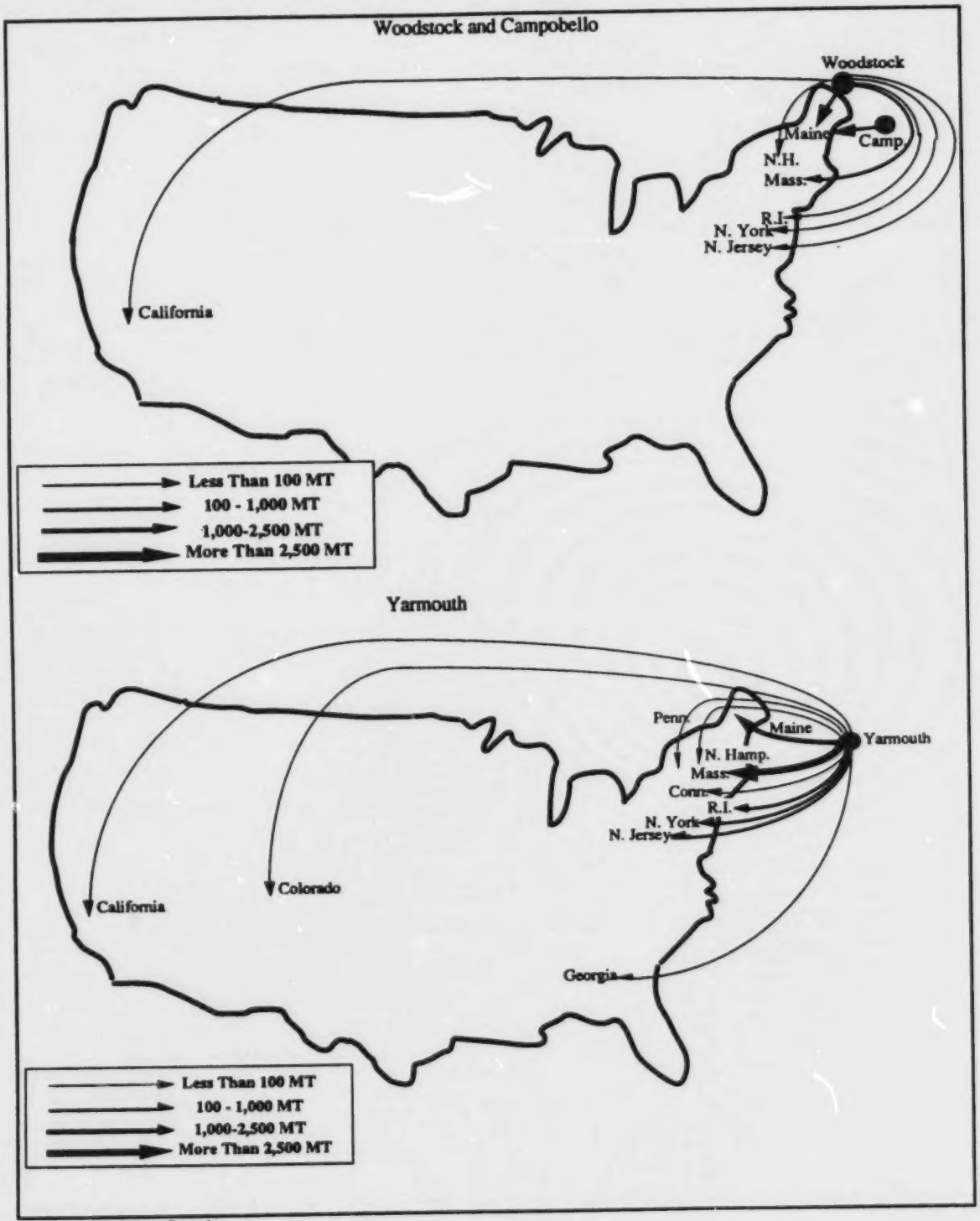


EXHIBIT 3.4 : Destination of live lobster shipments from points of exit (cont'd)



Source : Statistics Canada

3.1.2 Shipment and Seasonality

Since Nova Scotia is the dominant live lobster exporting province, monthly shipping patterns from it to each of the three key states; Massachusetts, Maine and New York over the last five years, were examined to illustrate any seasonality patterns. The same data was also compiled for shipments to Europe for purposes of comparison. With the exception of some extra sales to New York in the spring of 1988, the seasonal patterns are almost identical from year to year (Exhibit 3.5).

3.2 Lobster Meat

Frozen lobster meat is the second most valuable lobster product exported to the U.S. market. Unlike live lobster, frozen meat does not require a specialized distribution system; it can be handled in exactly the same manner as all other frozen seafood.

3.2.1 Routings and Destinations

Lobster meat is principally produced in New Brunswick and P.E.I. Over 90% is normally sold in the U.S. (Exhibit 1.7); the remainder primarily being exported to Western Europe. Shipments for Europe are principally shipped by container from Halifax. Almost all the U.S. shipments are trucked through St. Stephen and Woodstock as shown in Exhibit 3.6. The final destination states for shipments through these two points are illustrated in Exhibit 3.7. All shipments are destined initially for the eastern seaboard of the U.S.but, unlike live lobster, there is a wider variety of states represented. This illustrates the greater number of distributors capable of and interested in handling frozen product rather than live. The fact that frozen meat can be shipped with other frozen product allows greater flexibility in marketing as well.

3.2.2 Shipment Seasonality

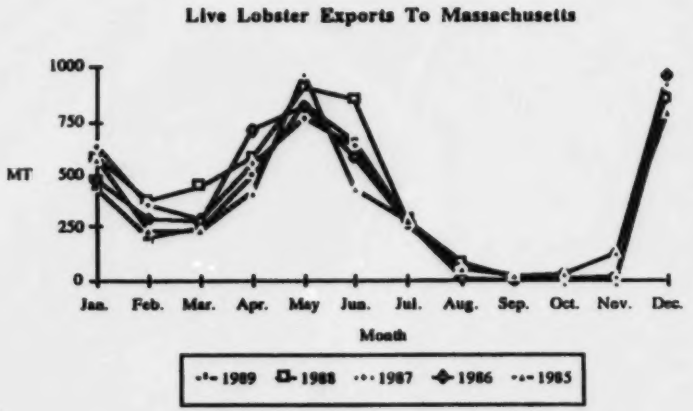
Monthly shipments of meat from each of the two key producing provinces, P.E.I. and New Brunswick, to Massachusetts were tabulated for the last five years. Since Massachusetts is the principal destination for much of the product it was thought it would be representative of the shipping patterns for meat in general (Exhibit 3.8). Monthly shipments from New Brunswick were extremely consistent from year to year. P.E.I.'s tended to vary more in volume but still followed a consistent pattern.

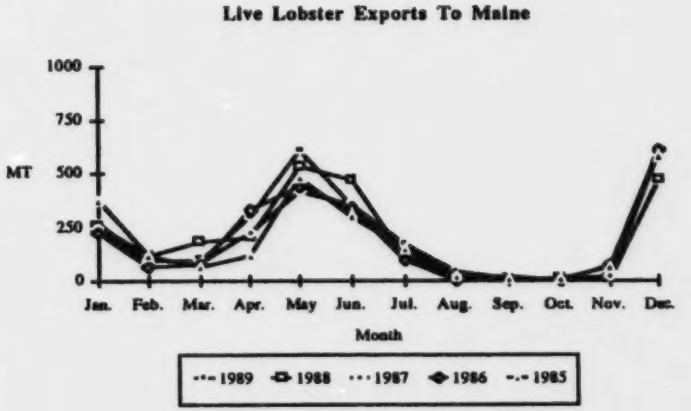
3.3 Other Lobster Products

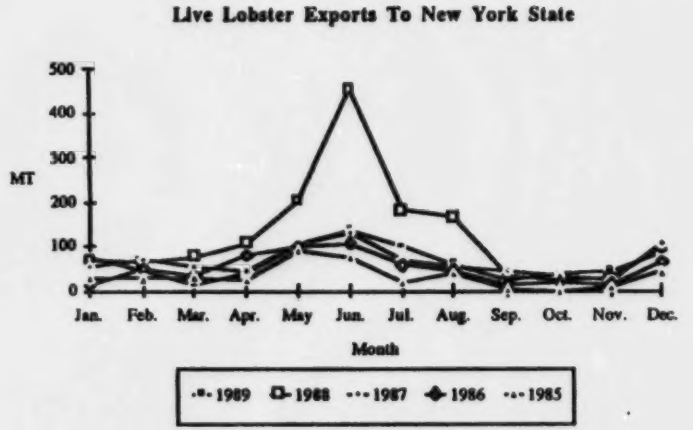
Although this study concentrated on live lobster, the routings and destinations of some of the other products were also briefly examined.

Statistics Canada's export categories are not sufficiently detailed to allow clear identification of all the specific lobster products. However it is possible to obtain a reasonable idea of those products shipped to the U.S. market and their routings. It can be seen in Exhibit 1.7 that very little lobster in brine goes to the U.S., while approximately half of the 'Frozen in Shell' category is sold there. This category would include a variety of vacuum pack, loose packed and possibly some brine product incorrectly identified on export documents. Europe used to be an important market for the hot pack product but this is all primarily sold in the U.S. now.

EXHIBIT 3.5: Nova Scotia Live Lobster Exports Seasonal Shipment Patterns







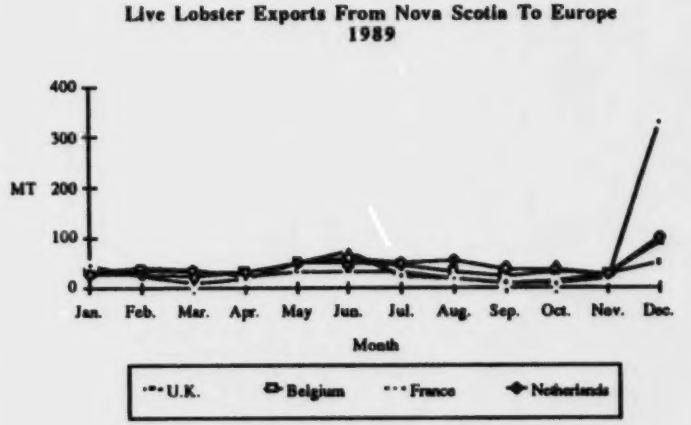
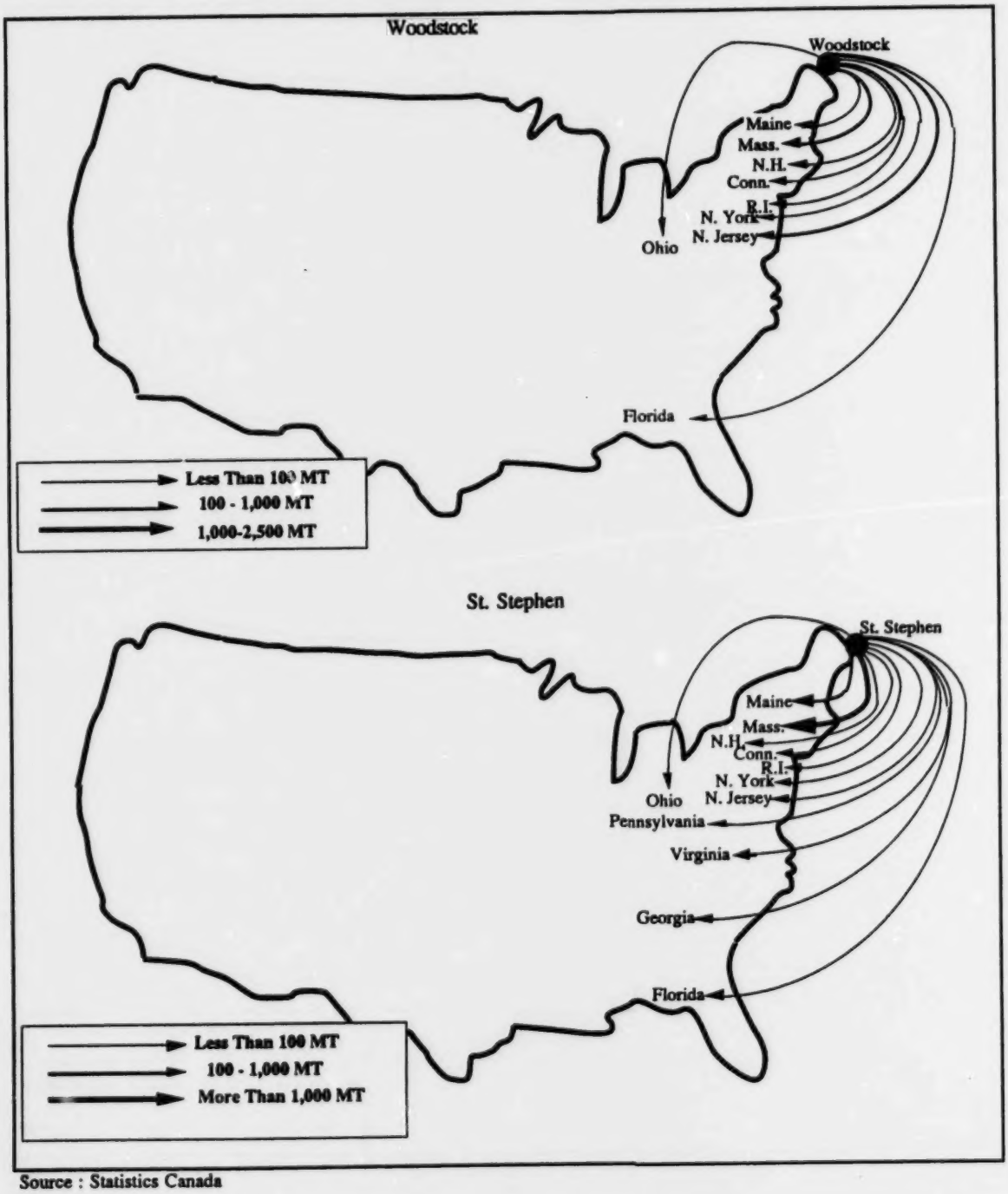


EXHIBIT 3.6: Frozen lobster meat - principal export routings (MT)

From: Exit Pt:	1989				Canada Export Totals		
	N.S.	N.B.	P.E.I.	Quebec	1989	1988	1987
Halifax	30	99	41	29	199	301	563
St. Stephen	41	1,382	80	-	1,503	1,129	1,590
Woodstock	34	579	408	71	1,092	570	850

Source: Statistics Canada

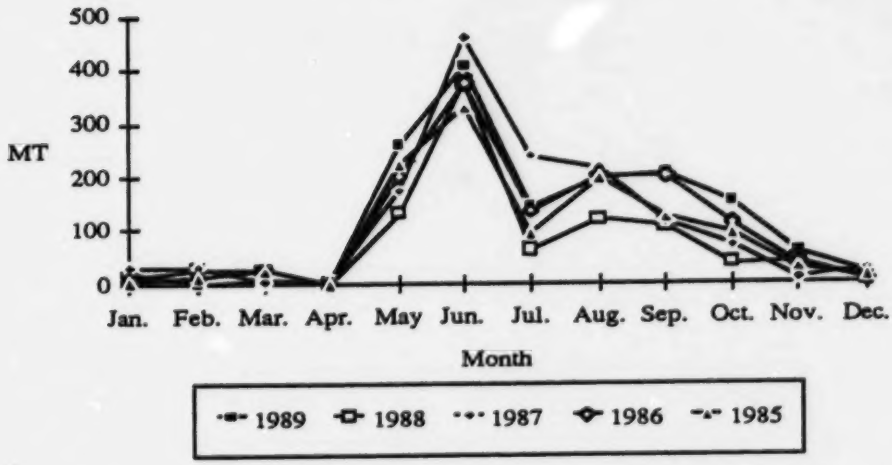
EXHIBIT 3.7 : Destination of frozen lobster meat shipments from points of exit



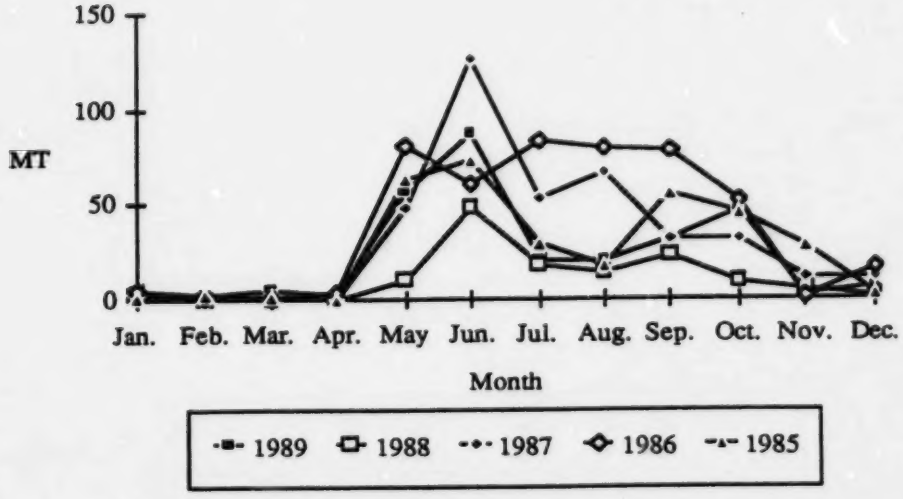
Source : Statistics Canada

EXHIBIT 3.8: Lobster Meat Exports Seasonal Shipment Patterns

New Brunswick Meat Exports to Massachusetts



PEI Meat Exports to Massachusetts



3.3.1 'In Shell' Other Than Live

This category includes all lobsters, except live, sold in the 'in-shell' form. The quantities shipped to the U.S. market from the various provinces over the last three years are shown in Exhibit 3.9. A comparison of total exports to the U.S. relative to total Canadian exports illustrates the relative importance of the U.S. market for each product type. A review of the data indicated Woodstock and St. Stephen were the principal exit points for the product destined for the U.S. This is as would be expected given the patterns for the other major frozen product, meat.

3.3.2 Canned

The export of hot pack canned products slowed dramatically in 1989 (Exhibit 3.10). P.E.I. and New Brunswick are the principal shippers. Again, this product primarily entered the U.S market through Woodstock and St. Stephen.

3.4 Logistical Factors

3.4.1 Trucking

Trucking is the most common method of transporting live lobsters to market. Processors typically ship from 10,000 to 40,000 lb. of lobster per truckload. They often use their own trucks but common carriers are also used. The delivery cost per pound varies with the size of load and the ownership of the truck but ranges from 5 to 12 cents/pound from Nova Scotia, New Brunswick and Prince Edward Island to the Boston area with approximately 5 cents/pound more to deliver to the New York area. Exhibit 3.11 is a summary of typical shipping costs.

The apparently low cost of 5 cents/pound reported by one processor for trucking lobsters from P.E.I. to Boston may be due to an inaccurate costing system (or the lack of one), a fully depreciated truck, the ability to obtain some backhaul freight, or a combination of these factors.

One large Maritimes trucking company indicated their policy was to only handle full loads of live lobster and to have the shipper load and seal the trailer; with the seal being broken by the consignee. They also prefer to handle full loads directly from one shipper to one buyer. This simplifies the transportation, as well as custom clearance procedures, all of which decreases the time the lobsters have to spend out of water. Common carriers will not insure the shipper against losses due to mortality but nevertheless it is in the carrier's long term interest to keep his customer's losses as low as possible.

Only shippers in southwestern Nova Scotia use the Yarmouth ferry; everyone else trucks to the U.S. through New Brunswick because it is less costly and saves time.

EXHIBIT 3.9: 'In Shell' exports of lobster to U.S.(1) (MT)

Origin	1989 In Brine	1989 Frozen	1989 Unfrozen	1988 In Brine	1988 Frozen	1988 Unfrozen	1987 Fresh(2) Frozen/All
Newfoundland	11	8	-	10	-	-	43
Prince Edward Island	35	55	26	97	88	68	67
Nova Scotia	10	63	37	10	138	69	226
New Brunswick	2	313	102	5	617	111	162
Quebec	6	37	1	1	31	5	77
Total Exports to US	**64**	**476**	**166**	**123**	**874**	**253**	**575**
Total all Exports	**2,929**	**1,297**	**219**	**4,041**	**2,357**	**422**	**3,863**

Source: Statistics Canada

1) Excluding Live
2) May not exactly compare due to change in Statistics Canada definitions.

EXHIBIT 3.10: Canned lobster exports to U.S.(1) (MT)

Origin:	1989 Airtight	1989 Not Airtight	1988 Airtight	1988 Not Airtight	1987(2) Canned
Newfoundland	-	-	7	-	-
Prince Edward Island	2	-	117	67	9
Nova Scotia	-	-	8	11	2
New Brunswick	11	4	172	86	37
Quebec	-	8	2	-	8
Total Exports To U.S.	**13**	**12**	**306**	**164**	**56**
Total All Exports	**27**	**28**	**944**	**226**	**97**

Source: Statistics Canada

(1) Excluding Canned Frozen Meat
(2) May not exactly compare due to change in Statistics Canada definitions

EXHIBIT 3.11: Typical trucking costs - live lobster (¢/lb)

From	To	Approximate Cost	Approximate Load
P.E.I.	Central Canada - own truck	20¢	5,000 lb
	Central Canada - common truck	30¢	40,000 lb
	Boston - own truck	5¢	25,000 lb
N.B.	Boston - own truck	12¢	10,000 lb
	New York - own truck	17¢	10,000 lb
N.S.	Boston - own truck	8¢	30,000 lb
	Boston - own truck	10¢	13,000 lb
	New York - common truck	20¢	13,000 lb

Source: Various Trucking Companies
Note: Costs are estimates from various processors and will vary with costing methods, size of truck, etc.

It was very difficult to obtain any information from U.S. carriers based in the Northeast concerning the onward shipment of Canadian lobsters to other areas of the country. They cited competitive reasons for not wanting to provide any information. One carrier did indicate that trucking live lobster from Boston to Florida would cost 7 cents/pound, to Baltimore 8 cents/pound and to San Francisco 20 cents/pound; approximately. Most New England distributors use trucking only for regional deliveries; otherwise air freight is used extensively. There is obviously a comprehensive and very competitive trucking service available in the U.S., and any lobster shipper wishing to organize onward shipments should have no difficulty in arranging transport.

3.4.2 Airlines

Both Canadian Airlines International and Air Canada are experienced carriers of live lobster. Most of their business from the Atlantic Provinces, however, is oriented towards Europe and Japan rather than the U.S.. This is because trucking is logistically more convenient, and less costly, than air freight for the principal markets in the northeastern U.S.. Both airlines carry lobsters from Eastern Canada to the west coast of the U.S., however, usually transhipping through Toronto and occasionally Vancouver. According to the airlines some Canadian shippers have tried to ship directly to cities such as Cleveland, Pittsburgh and Washington through Toronto but with limited success due to competition from New England suppliers and the lack of cool storage facilities at some of the airports in the central and southern U.S.

There is a comprehensive and very competitive air freight system available for live lobsters within the U.S.. All the major airlines say they 'specialize' in flying seafood. Logan Airport in Boston is the principal shipping point used by New England distributors, several of whom have holding/shipping facilities in the immediate area of the airport.

Typical U.S. cargo rates for shipments from Boston or Providence are shown in Exhibit 3.12. The various air lines cover the continental U.S. well, and all of them indicated they had surplus capacity available to handle additional live lobster (or other seafood) shipments. Delta Air Lines system map is included as Appendix 4 as a typical illustration of this coverage.

In the early days of air shipment of live lobsters there was a great deal of problems with leaking cartons, crushed cartons (and lobsters), missed connections and so on. These difficulties have now been overcome and there are well established guidelines for packaging and handling lobsters. If these rules are followed, there is no reason for difficulties in the air shipment of lobsters.

3.4.3 Holding Systems

Live lobsters are held 'in inventory' in a number of ways. The most common method, primarily used by fishermen and the smaller dealers, is to float large crates tied to wharfs or to the shore in sheltered areas. Larger tidal ponds are used in southern New Brunswick. These tidal systems typically range in capacity from 100,000 to 750,000 pounds. Many lobster dealers use tanks with a recirculating sea water system; typical capacities ranging from 15,000 to 100,000 pounds. The major live lobster dealer in Atlantic Canada has two dry land facilities with a total capacity of 2.5 million pounds in which lobster can be held individually almost indefinitely.

The best measure of the effectiveness of a holding system is the level of mortality achievable with it. Tidal systems have the most difficulty with mortality because disease can easily spread and there is no means of keeping the water temperature low. During this survey processors indicated mortalities at tidal systems ranged from 6 - 15%. Rates for tank systems ranged from virtually zero, for those dealers who only held lobsters for a very short time, to a maximum of 10%. Dry land facilities which are designed as long term, year round inventory systems, typically have rates in the 4-7% range depending on the condition of the incoming lobsters; which is a function of the fishing area and the time of year.

Many lobster dealers and distributors in the northeastern U.S. use self-contained holding systems. These tank systems may incorporate sea water chilling, recirculation, primary and secondary filtration, aeration and sterilization systems. Various types of tank systems are available commercially, ranging from a small 150 gallon unit for retail display to multiples of 1600 gallon units for dealers and major distributors.

EXHIBIT 3.12: Canadian air freight rates - live lobster (Cdn $/kg)

From Halifax to:	Shipment Size Over 100 kg	Over 200 kg	Over 500 kg	Over 1,000 kg
Boston	1.08	1.02	1.02	0.86
New York	1.08	1.02	1.02	0.86
Chicago	1.00	1.00	0.94	0.79
Miami	1.08	1.02	1.02	0.86
Los Angeles	1.11	1.05	1.05	0.88
Montreal	0.71	0.71	0.59	0.54
Toronto	0.80	0.80	0.71	0.66
Vancouver	1.98	1.98	1.89	1.75
Amsterdam	2.51	2.37	2.02	1.72
Copenhagen	2.63	2.49	2.14	1.84
Tokyo		over 300 kg - 3.89		

Source: Airline Rate Schedules - March 1990

Note: Rates are for shipments originating from Halifax and are representative for all Atlantic Canada airports.

EXHIBIT 3.13: U.S air freight rates - live lobster (Cdn $/kg)

From Boston to :	Shipment Size Over 100 lb	Over 250 lb
Atlanta	0.66	0.56
Baltimore	0.53	0.46
Charlotte	0.66	0.56
Chicago	0.53	0.46
Cleveland	0.53	0.46
Detroit	0.53	0.46
Kansas City	0.53	0.46
Los Angeles	0.79	0.66
Miami	0.66	0.56
Milwaukee	0.53	0.46
New Orleans	0.66	0.56
New York	0.53	0.46
Philadelphia	0.53	0.46
Phoenix	0.79	0.66
Portland	0.79	0.66
St. Louis	0.53	0.46
Seattle	0.79	0.66

Source: Eastern Airlines - March 1990

Note: For comparison purposes rates converted to Cdn $/kg at exchange rate of 0.87

4.0 DETERMINATION OF TARGET MARKETS

Distribution can be defined as a support function to marketing. Before evaluating the implications of changing the approach to distribution on the market expansion potential for lobster in the U.S., it is first necessary to define the significant characteristics of the market. Distribution system impacts can only be considered within that framework.

A cross section of companies involved in all sectors of the U.S. lobster marketing system was interviewed. Information was collected on issues such as; the importance of lobster in their business, typical volumes they handle and what they see as the problems and the opportunities with lobster. This data is analyzed in detail in the companion Consumer Preference Study from the perspective of these customer attitudes. This same data is summarized in this section, in essentially the same format as the interviews were carried out, to provide the market demand background for the distribution system impacts outlined in Section 5.

This section focuses on live lobster because it is unique and is the most demanding from a distribution system standpoint.

4.1 Relative Importance of Lobster

With the exception of several live lobster distributors in the North East, who naturally considered lobster very important to their business, the majority of brokers, distributors, restaurants, supermarkets and seafood specialty stores did not consider lobster to be particularly important. This was most clearly illustrated by the number of representatives from all sectors who carried lobster because their customers expected them to have it, or to use as a loss leader, and not because it was particularly profitable. Very few indicated profit generating ability was a significant factor in them remaining in their particular part of the lobster business. Obviously there are some companies who specialize and do well with lobster, but this study tried to capture the overall viewpoint, and that could best be described as not generally enthusiastic.

4.2 Typical Purchasing Parameters

Three key parameters which define how live lobsters would have to be offered to underdeveloped market areas are: preferred lobster sizes, average regular purchase quantities and any seasonality fluctuations in demand.

4.2.1 Size Preferences

The 1.0 to 1.5 pound live lobster was the most popular overall with restaurants, supermarkets and seafood specialty stores. Because of the need to stay within a certain unit meal menu price, lobster size was a major critical factor for restaurants. Retail outlets, on the other hand, were also interested in larger sizes if the pricing was attractive.

From the standpoint of expanding markets it is important to note that over 70% of restaurants surveyed in the Central, Southeastern and Pacific regions preferred to buy the 1.0 to 1.5 pound lobster.

4.2.2 Average Purchase Quantities

Most restaurants and supermarkets purchased 100 to 500 pounds of live lobster on a weekly basis. Some buyers for multiple unit chains purchased in excess of 1,000 pounds weekly. The seafood specialty stores which carried live lobster tended to purchase up to 1,000 pounds weekly. All supermarkets, restaurants and specialty stores surveyed throughout the U.S. obtained their lobster from distributors; none purchased directly from processors.

4.2.3 Seasonality

The greatest demand for live lobsters is during 'special' days, particularly the July 4 weekend, Mother's Day, the Labour Day weekend and so on. From the standpoint of developing new markets, these would be the critical periods to have ample supplies available to support market promotion activities.

4.3 Constraints to Sales Growth

The majority of this cross-section of representatives from the U.S. lobster market stated the most significant factors inhibiting the growth of their lobster business was the generally high prices and their relative instability. The instability made it difficult to plan menus, promotional specials, etc., and the high price levels meant they were operating in the upper end of their particular customers'(ie: restaurants for distributors, the general public for restaurants, etc.) price 'tolerances', where volume tends to be lower and, in many cases, margins are tighter. Although other seafood products are, of course, a competitive factor, they were not considered to be a direct reason for holding back sales of lobster. Lobster was perceived by many to be in a niche of its own in the market.

There was some complaints about poor quality of live lobsters which seemed to principally relate to high mortality and/or poor yields. As is mentioned elsewhere, this should not be a problem if lobsters were purchased from reputable dealers and if proven handling and shipping procedures were followed. The impression left from discussions, with distributors in particular, outside the Northeast was that relatively poor service from primary distributors in the New England area was another reason for their lack of ability to expand sales. This is most likely due, in many cases, to a lack of effort to locate, and deal with, reputable suppliers on an on-going basis.

4.4 Regional Variations

No significant regional variations in consumer preference attitudes for Canadian lobster could be determined from the survey process aside from the obvious fact that lobster is a better known product in the Northeastern U.S. The actual attitudes towards lobster and the reasons for carrying it (and for not carrying it) showed a remarkable commonality throughout the U.S.. As previously mentioned, these related more to the requirement to have it on a menu (for restaurants), or to be able to say they had some access to it (for distributors), then because of any significant profitability potential. These feelings were expressed from all sectors and from all regions.

Although it is only a subjective measure; it was quite noticeable during the interview process that seafood distributors in the Central area of the U.S., in particular, were much more interested in discussing their lobster business and its problems then were those on the west coast and especially those in New England. New England distributors, on the whole, likely feel they understand the lobster business and their particular position, large or small, in it and really did not see anything to be gained from the interview process. On the other hand, those in the central states seemed to be

interested in obtaining further information so they could further evaluate whether there was any potential business for them. In contrast, those on the west coast who were interviewed, and who were actually interested in lobster, seemed to be reasonably happy with their service out of Canada or New England.

4.5 Sector Variations

There was no absolute statistical data available to define the volumes of live lobster sold through food service, supermarkets and seafood specialty stores. It was concluded in the Consumer Preference Study that restaurants likely offered the greatest potential for profitable market expansion from a Canadian supplier's viewpoint. This was based in part on the discussions held with broker/distributors and restaurant operators, and also on the fact that supermarkets tended to buy more on price and as a result may be more likely to abruptly vary purchases or change suppliers. Regardless, for the purposes of this study, the key point is that all these businesses source through local distributors.

4.6 Target Markets - Conclusions

The above discussion can be summarized as follows. Any changes to their existing distribution system by Canadian lobster shippers, in an attempt to expand their markets, would have to be done within the following framework:

- principal purchasing parameters of preferred lobster sizes, average order size and seasonal demand patterns are relatively consistent throughout the U.S.
- significant sales expansion both within existing and in new markets, regardless of the distribution system, will always be difficult given the traditional patterns of lobster prices
- since much of the experience of customers, at all levels, in less developed market areas has not been good; offers of new supplies can be expected to be greeted with initial skepticism. To overcome this, service levels would have to be consistently high.
- there is likely some potential new business for any individual Canadian supplier in the Northeast region of the U.S. simply by contacting more distributors. This is unlikely to move more lobsters in total, however, as it will probably only displace some other Canadian supplier
- the geographic area with the most 'untapped' potential would appear to be the central area of the U.S.

This section provides a brief consensus of the opinions and comments obtained from the various sectors of the U.S. lobster markets. They form the background for the discussion of the distribution aspect of the prospects for market expansion in the following section.

5.0 EXPANDING MARKETS; IS DISTRIBUTION THE PROBLEM?

Many factors impact on Canadian lobster suppliers' ability, either individually or as an industry, to increase their market penetration in the U.S.. This section summarizes these elements and establishes the relative significance of the distribution system.

5.1 Atlantic Canada Supply Factors

The Atlantic Canadian lobster industry is faced with several supply related issues which directly affect market expansion capability:

- there is adequate total volume of lobster available to sustain a market development effort. Atlantic Canadian landings have been increasing and although there is no specific scientific evidence available, many expect volume to at least remain steady at present levels.

- the market, in general, requires live lobster one pound or larger, smaller lobsters were of limited interest in New England only.

- based on discussions with a wide cross-section of market participants, the greatest opportunity would appear to be for live lobsters. In general, the existing industry can supply live lobsters relatively easily.

- the landings seasonality patterns are likely to remain similar for the foreseeable future. Therefore, if new markets are to be developed requiring a more stable supply basis, either existing holding capacity will have to be utilized more fully or some additional holding capacity may be required.

- the Canadian industry sells lobsters as a commodity; that is prices fluctuate continuously in response to changes in supply and demand. Very few Canadian companies could afford, even if they wished, to offer customers long term price stability without having a correspondingly firm control of their raw material cost; the inherent financial risks are just too great. In view of the fact that one of the most common reasons given by U.S. buyers for not expanding their lobster business was price instability, this may be one of the most difficult hurdles to overcome.

5.2 Logistical Factors

Atlantic Canada has one basic logistical factor in its favour when attempting to expand its U.S. market penetration; it is close to the market. There are a variety of other factors:

- there are no logistical barriers to the expansion of the frozen lobster product market. These products are no different in their handling requirements from all other frozen seafood. There is, of course, a complete transportation and cold storage system in place throughout North America capable of handling these products.

- live lobster requires its own specific distribution system. The existing system from Canada to the U.S. is heavily dependent on trucking. Any expanded market penetration to new areas will be heavily dependent on air shipment and may require the establishment of some new or additional holding facilities in some of the potential market areas and perhaps at some airports as well.

- the technology of handling, packaging, holding and shipping live lobsters is well established and given that any specific investment is economically justifiable, acceptable levels of mortality and yield should be attainable.

5.3 Economic Risk

The most basic marketing economics related factor is that lobster is already known throughout the U.S.; no great investment would be required to actually introduce, (as opposed to promote), lobster to the U.S. consumer as though it was a totally new species.

There are two incremental cost components associated with developing new market areas; the additional transportation cost and any additional financial costs related to holding inventory in order to provide the new market with supplies when required. A typical example of this incremental cost would be if it was necessary to hold lobsters (which would, under other circumstances have been sold elsewhere) to provide a new distributor with ample supplies for a particular holiday. Holding live lobsters is expensive, not only because the inventory must be financed but also because of mortalities. An average rate of mortality can be built into the average cost of the product but there is always the risk of a major disease outbreak, water problems, etc.. There is also the opportunity cost involved in 'turning down a sale today' at an acceptable price in order to support a market 'tomorrow'. These economic risks are no different, however, than those which were dealt with when the industry expanded successfully into the Western European, and, to a lesser extent, the western U.S. and Japanese markets.

5.4 Competitive Situation

A significant number of the distributors, restaurants, supermarkets and seafood specialty stores surveyed mentioned lobster tails, shrimp, king crab, etc., as competition for Canadian (and New England) live lobster. This is as would be expected. However, a very common alternative reaction, from all sectors, was that lobster really had no direct competition; that it was essentially a stand alone product. This opinion was particularly prevalent away from the Northeast; the areas of interest from the new market development standpoint.

5.5 Relationship with U.S. Distributors

Distributors play a vital role in the marketing of lobster. Attempting to open up new market areas in the U.S. by simply 'going around' the traditional distributors in the New England area would not be a straight forward process. It would be necessary to develop relationships with distributors in the new areas, which would not necessarily be easy. Some factors to be considered would be:

- if this new market development interfered in any significant manner with the existing business of New England distributors, they can be expected to retaliate by a number of means, depending on the particular circumstances. This could involve price cutting in that market, cutting back purchases by one means or another from the Canadian supplier and so on. Their objective would be to not make it worth while for the Canadian supplier or the local distributor to continue their efforts.

- Canadian suppliers can not expect to develop new markets without 'investing' in the business in conjunction with a local distributor. The distribution function is a necessary one and must be paid for one way or another. In fact, it is probably more important to have a good, reliable, aggressive distributor in a market farther from 'home' than it is in New England, where there are more alternatives available.

- a new distributor will have no interest in developing a new market area and investing in the necessary facilities, employee training, market promotion, etc., if they feel they will not be supported by the Canadian supplier consistently over the long term, or if they will be cut off if their market can not absorb the peak prices obtainable from time to time from more established markets.

5.6 Conclusions

With the possible exception of some of the largest firms, the incremental annual increase in supply of lobsters for each of the 'average' Atlantic Canadian lobster suppliers has not been dramatic enough to force them to consider investing in extensive new market distribution. The most logical approach for the smaller firms would normally be to work with their existing New England distributors in expanding their market coverage in an appropriate way for the size of their increased supply.

Increasing supplies of lobster in recent years were apparently not moved into new markets in the U.S. in any significant way. This would seem to be more related to a combination of the characteristics of lobster pricing and perhaps a lack of aggressive marketing by both Canadian and New England suppliers, than any particular constraints in the distribution system itself.

6.0 CONCLUSIONS

The conclusions of this study can be separated into two distinct areas; the characteristics of the current lobster distribution system and an assessment of the potential to improve the returns to the lobster fishery through expanded distribution in the U.S.

6.1 Current Distribution System

The current system is characterized by several factors:

- there is very consistent shipment routings from year to year, particularly with regard to the trucking of lobster to the particular U.S. states. This would indicate that most of the business relationships between Canadian shippers and New England buyers are long standing and relatively stable.

- there is very consistent, almost identical in some cases, monthly shipping patterns from year to year from individual provinces to key states. This would again illustrate very well established business relationships between shippers and buyers.

- the majority of lobster trucked to the U.S. exits through one of three points; St. Stephen, Yarmouth or Woodstock, and this concentration appears to be increasing.

- Massachusetts and Maine are the principal destinations for live lobster shipped from all Atlantic provinces. Shipments to other states, although relatively consistent from year to year, are not nearly as significant.

- frozen lobster meat is shipped from Canada to a wider number of states than live lobster but Massachusetts and Maine remain the principal destinations.

- all the data on shipment routings and seasonality would indicate that very little changes in U.S. marketing distribution patterns has been made by Canadian shippers as a consequence of the steadily increasing lobster landings of the last several years.

- there was no apparent inherent problems with the logistics of the initial part of the existing distribution system from Canada to the U.S.. Both trucking and airline systems seemed capable of handling the required volumes; correct packaging and handling methods are well established and, if followed, problems should not be significant.

6.2 Market Expansion from Extended Distribution

Attempting to increase sales to the U.S. market through extended distribution raises the following points:

- lobster has its own perceived 'niche' in the market place, particularly in the northeastern, central and western regions of the U.S. and, therefore, it has the potential to be marketed successfully where ever economics and logistics permit.

- if the existing distribution system (through New England) is not able to successfully expand into new areas; the optimum target area for Canadian suppliers to attempt an incremental market expansion appears to be the northern and central U.S. states.

- distributors in these target areas will only be interested in developing a new live lobster trade directly with Canadian suppliers if they can have reasonable assurance of reliability in supply and enough stability and competitiveness in pricing that their investment in market development is worthwhile for the long term. Therefore, an effective distribution linkage to these areas to support these new distributors would be a key factor in getting their interest.

- there is adequate transportation infrastructure (both airline and truck) available within Canada and the U.S. such that central U.S. markets can be reached. Whether individual Canadian suppliers consider the potential returns to be worth the investment of time and money to compete directly with the traditional New England distributors over the longer term is another matter.

The data, comments and conclusions of this study should be considered in conjunction with those of the companion study of Consumer Preferences

APPENDICES

APPENDIX 1

LIST OF CONTACTS

Description	Area	Company Name	Contact Name	Phone
Processors	N.S.	Arisaig Fisheries Ltd.	Brenda MacDonald	[902] 863-5906
		Clearwater Fine Foods	Colin MacDonald	[902] 443-0550
		The Fishbasket Ltd.	Reg Hartlen	[902] 465-6330
		LJC Fisheries Ltd.	Calixto Ribau	[902] 857-3234
		Waybret & Sons Ltd.	Cecil Waybret	[902] 745-3477
		Victoria Co-Operative	Lloyd Lamey	[902] 336-2541
		R.I. Smith	Babe Smith	[902] 723-2380
		Walkers Wharf	Monte Snow	[902] 445-3474
		Lahave Seafoods	Dave Himmelman	[902] 688-2773
		D.B. Kenney Fisheries	Dan Kenney	[902] 839-2023
	N.B.	Paturel	Jim Bateman	[506] 532-4431
		Aquatic Seafood	David Foster	[506] 635-1300
		Fundy Lobsters	Lowell Thomas	[506] 662-3144
		Pecheries Cap-Lumiere	Maurice	[506] 523-4445
		Pecheries GEM Ltd.	Roger Foulem	[506] 727-5217
	P.E.I.	Babineau Fisheries	Pernel Trainer	[902] 961-2705
		Queens Fisheries Ltd.	Jim Harris	[902] 436-8612
		Keeping & McKay Ltd.	Milton MacKay	[902] 962-2257
		Tignish Fisheries Co-Op	Glen MacRae	[902] 882-2050
		Acadian Fishermans Co-Op	Valmore Arsenault	[902] 854-2675
	Nfld.	NSP Arnolds Cove	Tom Osborne	[709] 463-2445
	Que.	Assels Seafoods Inc.	Albert Assels	[418] 752-3524
Whole/Distr.	North Central			
		D. Berkowitz Inc.	Mike Berkowitz	[216] 793-7576
		Illionois Fruit and Produce	Dick Pavelka	[815] 673-3311
		Reinhart Institutional Foods	Mike Husslein	[608] 782-2660
		Western Fish Company Inc.	Mike Davidson	[313] 237-0080
		Foremost Seafood	Tom Patterson	[513] 298-1986
		Euclid Fish Company	John Young	[216] 951-6448
		Harps Fish & Seafood	Edna Dupont	[812] 476-3057
		Micosa Inc.	Bob Andetrson	[708] 632-1200
		Hamilton Fish Co. Inc.	Arnie Zatzman	[313] 832-6100
		Salasnek Fisheries	Art Tillman	[313] 567-2000
		Superior Fish Company	Kevin Dean	[313] 541-4632
	South East			
		Amer Institutional Foods	Allen Parsons	[616] 266-7114
		Biggers Brothers Inc.	Tom Parrott	[704] 394-7121
		L.M. Sandler & Sons	Lenny Bernstein	[804] 464-3551
		Bell Sysco Food Services	John Lightfuss	[704] 255-7676
		S. Dipaula & Sons Seafood	Tom Schisler Jr.	[301] 866-8100
		Cannon Seafoods Inc.	Annette	[202] 337-8366

Description	Area	Company Name	Contact Name	Phone
		Pride of Virginia Seafood	Stan Obier	[804] 529-7350
		Crosby's Seafood	Dan Long	[803] 723-1278
		Barnacle Seafood Inc.	Jerry Oxenburg	[305] 486-8000
		Saint Matthews Seafood Co.	Stan Gentle	[502] 895-0167
		Alabama Institutional Foods	Carl Logan	[205] 345-0474
		Lewis Seafood	Angela Leblanc	[601] 545-2281
	Central			
		Allen Foods Inc.	Zell Firestone	[314] 426-4100
		Arrow Sysco Food Services	Bobby Austin	[504] 837-1015
		Capital City Fish Inc.	Ronald Moseng	[612] 224-4719
		Pegler Sysco Food Services	Tom Rivett	[402] 423-1031
		Kraft Food Service	Gil	[501] 375-3282
		Shamrock Foods	Mike Meyers	[602] 272-6721
		East Side Fish Market	Dave Veach	[515] 288-2124
		Quality Meats & Seafood	Lee Mocklar	[701] 282-0202
		Fresh Seafood Wholesale	Susan Szczucinski	[913] 384-2190
		William Davis & Sons Ltd.	Brad Anderson	[405] 751-4660
		Seafood Supply Company	Paul Clark	[214] 565-1851
		Captain Franks Seafood	Captain Frank	[915] 682-3883
		Whole Earth Grainery	Vince Arbour	[307] 745-4268
		Northeast Seafood Products	Paul Packer	[303] 292-2526
		Nevada Seafood Co.	Bill	[702] 292-2526
	Pacific			
		A&B Foods	Mr. Sierra	[213] 629-3134
		Galetti Bros. Foods	Mr. Ciaramitaro	[213] 262-8222
		Pacific American Fish Co.	Peter Huh	[213] 623-2982
		Ocean Pride Seafoods	Mark Palmer	[206] 281-4490
		University Seafood & Poultry	Dale Erickson	[206] 281-4490
		Greens Seafood	Richard	[503] 246-8245
		Fitts Fish & Poultry Market	Gene	[503] 364-6705
		All Seas Wholesale	Richard Howse	[415] 468-4800
		Canton Market	Robert Leon	[415] 362-5588
	North East			
		Stavis Seafoods	Richard Stavis	[617] 482-6349
		Sea Trek Enterprises	Peter Coop	[401] 884-3814
		James Lobster Fisherman Inc.		[603] 964-9906
		Atlantic Lobster Company	David Mersfelder	[607] 233-0871
		Eastbourne Lobster		[203] 248-8046
		J.H. Hahn Seafood		[201] 402-0900
		TLC Lobster Corp.		[201] 472-1644
		Mr. Mofta & Sons		[609] 994-3800
		Sullivan & Fitzgerald Food Brks.	Eugene Sullivan	[201] 994-3800
		Fulton Fish & Seafood		[518] 482-8811

Description	Area	Company Name	Contact Name	Phone
		Reisz's Superior Seafood	Adam Reisz	[607] 723-8607
		Bay Ridge Fish Market	Jim Thomson	[718] 745-4848
		Jordan's Lobster Dock		[718] 934-6300
		Schneiders Fish & Seafood Corp.		[716] 885-1460
		Delica-Seas Seafood		[916] 877-3411
		Portion-Pak Seafood		[516] 285-6100
		Crystal Cove Seafood Crorp.		[576] 759-2120
		Cahill Fisheries		[315] 343-3230
		Specialty Seafood Buying Group	Carl Struss	[215] 820-5966
		James Bartoli Inc.		[215] 243-9014
		J.P. Bennis Company	Jim Bennis	[215] 542-1390
		Neptune Seafood Inc.		[717] 337-3729
		Century Seafood Inc.		[215] 336-9000
		Dockside Seafood		[215] 286-0300
Specialty	N.East	Adelphia Seafood Inc.	Chuck Smith	[215] 670-2500
		Stuarts Seafood	Wayn Vorpahi	[516] 267-6700
	N.Cent.	Shrimp Boat Seafood	Bob Tillinghast	[513] 434-3163
		Seafood Merchants Ltd.	Roy Axelson	[708] 634-0900
	Pacific	Tarantino's Fish & Poultry	Gayton Tarantino	[707] 643-1587
		Mr. Fish Seafoods	Mark McCulloch	[707] 443-2661
	S.East	Joe Patti Seafood Co. Inc.	Joe Patti	[904] 432-3315
		Faulkners Seafood Company	Dorothy Buffkin	[804] 393-6960
	Central	Lipseys Fish Co. Inc.	R.W. Lipsey	[901] 767-8512
		Port Arkansas Seafood Co.	John Levesque	[512] 749-5774
Supermarkets	North Central			
		Cardinal Foods Inc.	Norm Muszynski	[614] 878-7171
		CWC Companies Inc.	Danny Burkett	[419] 422-8090
		Rogers Markets Inc.	Ellen Harrington	[219] 423-4376
		Scotts Food Stores Inc.	Mr. Valentine	[219] 483-9357
		Wallmans Food Management	Randy Zellers	[317] 564-6895
		Bormans	Dan Halpin	[313] 270-1000
		Eberhard Foods	Willy Woellper	[616] 791-0701
		Al Naimi Enterprises	Al Naimi	[313] 894-2466
		Hamady Brothers Food Markets	Pat Haley	[313] 744-0000
	South East			
		Giant Food Inc.	Bruce Steinberg	[301] 341-4100
		Safeway Stores Inc.	Fred Strauss	[301] 386-6500
		Brunos Inc.	Billy Moore	[205] 940-9400
		Delchamps Inc.	David Whatley	[205] 433-0431
		Grande Supermarkets	Signor Agrait	[809] 783-8391
		Harris Teeter Inc.	Bob Rowe	[704] 567-3000
		Ingles Markets	Steve Slade	[704] 669-2941
		Red Food Stores	Mark Grain	[615] 892-8029
		Publix Supermarkets Inc.	Brian Ward	[813] 688-1188

Description	Area	Company Name	Contact Name	Phone
		Pueblo Int'l Inc.	Mr. Patrick	[305] 977-2500
		Winn Dixie Stores Inc.	James Grant	[904] 783-5000
		Randall Foods	Tom Litzler	[606] 269-5388
		Foodtown Supermarket	Mr. Adams	[606] 269-4387
	Central			
		Byerly Foods		[612] 831-3601
		Hy Vee Foodstores Inc.	Danny Lukazsky	[515] 774-2121
	Pacific			
		Fred Meyer Inc.	Vern Nickens	[503] 232-8844
		Safeway Stores Inc.		[206] 455-6444
		Ralphs Grocery Company	Jim Lanter	[213] 637-1101
		Lucky Stores Inc.	Hank Corwin	[213] 612-0350
		Alpha Beta Company	Keith Lee	[714] 738-2000
		Safeway Stores	Rory Frink	[213] 923-7531
		Hughes El Rancho Markets	Frank Morello	[213] 227-8211
		Albertsons	Egan Burgelson	[213] 691-0835
		Stater Bros. Markets	Kevin Schubert	[714] 783-5000
		Foods Co. Markets Inc.		[213] 725-1500
		Super A Foods	Ed Fitcum	[213] 634-2680
		Mayfair Markets	Mr. Ryan	[213] 638-2842
	North East			
		The Stop & Shop Supermarket	Ken Howe	[617] 770-8000
		Allegro Supermarkets	Rick Wheeler	[603] 669-3250
		Fleming Foods of Pennsyslvania		[215] 935-5000
		Acme Markets Inc.	Cathy Prickett	[215] 889-4000
		Farm Fresh Supermarkets	Jim Newton	[804] 480-6700
		Super Fresh Food Markets	Joe Ellmore	[804] 743-1675
		M. Marraccini & Co. Inc.	Glen	[412] 384-4250
		OK Grocery Company	Cliff Randolph	[412] 963-6200
		First National Supermarkets	Lisa Bidwell	[203] 627-0241
		Grand Central Supermarkets	Shep Goldsmith	[203] 357-9775
		D'Agostino Supermarkets	Al Marinelli	[914] 576-1820
		King Kullen Groc. Co. Inc.	Tony Baccaria	[516] 333-7100
		Supermarkets General Corp.	Gene Itri	[201] 499-3000
		Kings Supermarkets Inc.	Rony Ruccio	[201] 575-3320
		Tops Markets Inc.	Jim Lean	[716] 827-3635
		Wegmans Food Markets Inc.	Karl Salamone	[716] 328-2550
Restaurants	North Central			
		The Stouffer Restaurant Co.		[216] 464-6606
		Paragon Corporation	John Stapleton	[216] 221-4388
		Kings Island	Jeffrey Richards	[513] 398-5600

Description	Area	Company Name	Contact Name	Phone
		Lettuce Entertain You Ent. Inc.	Martha Spezia	[312] 878-7340
		Levy Organization	Lisa Howard	[312] 664-8200
		Nicks Fish Market Inc.	Steve Karpf	[312] 621-0200
		Maverick Family Steak House	Russ Hruby	[217] 787-4660
		Harris O. Machus Ent. Inc.	Mr. Kreiger	[313] 642-1560
		Maple Management Corp.	Bruce Cameron	[313] 646-7839
		C.A. Muer Corporation	Tony Adams	[313] 965-5489
		Gasthaus	Phil	[414] 544-4460
		Meurer Restaurants	Steve Balistreri	[414] 771-8200
	South East			
		New Orleans Cafe	Mark Marley	[601] 957-2459
		Patricks Restaurants	Patrick Hanon	[314] 878-6767
		Boston Seafood Company	Haeju Abreish	[314] 621-3474
		Hanna Systems	Al Jordan	[302] 539-3095
		Chesapeke Bay Seafoods	Frank McLaughlin	[804] 220-0164
		Miltons Pizza House	George Kotarides	[804] 460-6390
		Libby Hill Seafood Inc.	M.A. Connel	[919] 294-0505
		Jones Fish Camp	Vinny Jones	[704] 256-8441
		Mayflower Seafood Restaurants	Gus Fragakis	[919] 427-0684
		Neighborhood Rests. of America	Jeff Francisco	[404] 765-9000
		Savannah Fish Copmpany	Mr. Conswaglia	[404] 659-1400
		Sea Horse Restaurants	John Kootoofaris	[302] 227-7451
		Calico Jacks of Florida Inc.	Tom Tomlin	[407] 767-2529
		Chadwicks Restaurant	Earl Raven	[813] 472-5111
		Red Lobster Inns of America	Jim Salmon	[407] 851-0370
		Crab Pot Restaurant	Wayne Cordero	[305] 565-2722
	Central			
		Jerrico Inc.	Jim Everett	[606] 263-6000
		Mike Fink Restaurant Inc.	Greg Blanchett	[606] 261-4212
		Edwards Restaurant	Larry Edwards	[615] 522-2911
		Beal Street Inc.	Tim Pohl	[901] 526-1966
		Shoneys Inc.	David Dobbs	[615] 391-5201
		The Landing Inc.	Jimmy Meekes	[205] 349-1803
		Morrison Inc.	Larry Davis	[205] 344-3000
		Drusilla Seafood Restaurants	Jeff	[504] 927-8844
		Dons Seafood & Steakhouse	R.L. Landry Jr.	[318] 235-3551
		Zuider Zee Seafood Restaurants	Bob Denson	[405] 478-2515
		S&J Oyster Company	Howard Smith	[918] 742-5076
		Catfish Kitchen	Rick	[409] 832-0417
		No. 1 Pearl Street	Paul Seikil	[214] 661-3616
		Pelicans International Inc.	David Osborn	[214] 931-1502
		Wall Streets	James Cook	[214] 991-5545
		Willie G's	Gene Osburn	[713] 850-7190

Description	Area	Company Name	Contact Name	Phone	
	Pacific				
		Pacific Coast Restaurant Merch.	Keith Dean	[503]	684-2803
		Mad Anthonys Inc.	Tim Furleman	[206]	455-0732
		Scotts Seafood Grill & Bar	Simon Harrington	[714]	979-2400
		Scomas	Tom Creedon	[415]	771-4383
		Faz Restaurants	Fazco Poursohi	[415]	391-6317
		Patouts	Andre Patout	[213]	475-7100
		Bodega Bay Seafood Restaurman	Greg Rasmussen	[818]	707-1040
		Delaneys Inc.	Mike Salasar	[714]	991-3632
		Specialty Restaurant Corp.	Bob Remeres	[714]	634-0300
		Hofs Hut Restaurant	Paul Bowman	[213]	595-5476
		Forty Niner Shops	Bill Beck	[213]	985-4138
		Duckett & Wilson Dev't Corp.		[415]	493-4744
	North East				
		Food & Beverage Management	Gary Oleson	[617]	332-2932
		Legal Sea Foods Inc.	Keith Silva	[508]	783-8084
		Tuxedo Junction	Ronald Jowdry	[203]	748-2561
		Roadway Motor Plazas Inc.	Sal Farfaglia	[607]	775-3500
		The New York Rest. Group	Doug Greenfield	[212]	980-4912
		Hideaway Restaurants	Carlo Mattiello	[212]	947-8940
		Lenny Clam Bar	Joseph Decandia	[718]	845-5100
		Chefs International Inc.	Bruce Brander	[201]	295-0350
		North American Lobster Co.	Joe	[201]	863-5577
		Evelyns Seafood Grill	Steve Minnolis	[201]	352-2022
		Marshalton Inn Inc.	Mary Beth Freeze	[215]	692-4367
		Seafood America	Bill Smith	[215]	672-2211
		Original Seafood Shanty's	Leonard Moskoff	[215]	245-3500

APPENDIX 2

SURVEY QUESTIONNAIRE

Processor/Shipper Questionnaire

Company Name :	Contact :	Phone :

Block 1 - Products

[1] Is lobster <25%, 25-50%, 50-75%, or >75% of your sales? _____
[2] Are your lobster sales <$1m, 1-5m, >5m per year ? _____
[3] What of the following products do you sell ? (X)
[4] Where do you ship your (live/frozen/other) (specific product name) to ? (X)

			Markets								Central
Products		X	Boston ?	N.York ?	L.A. ?					Europe	Japan	Canada
Live	crate run											
	chicken											
	selects											
	large											
Frozen	11.3 oz											
	2 lb											
	Rw. Tls.											
	Boilers											
Other	Brined											
	Hot Pack											

Block 2 - Sourcing

[5] Do you buy lobsters from (N.S./N.B./PEI/Que) (specific districts) ? (X) Any others ?
[6] What % of canners and markets do you get from (specific districts)?
[7] How many pounds do you buy from (specific district)?
[8] How many years have you been buying from (specific districts)?

Area			%				
Prov.	District	X	Canners	Mkts.	Quantity	Years	Other
N.S.	C.Breton						
	SWNS						
	S. Shore						
	N. Shore						
N.B.	N. Shore						
	S. Shore						
PEI	N. Shore						
	S. Shore						
Quebec	Mags						
	N. Shore						
	Gaspe						

Block 3 - Pounding

[9] Do you pound your lobster ? Y/N (Circle)
[10] Where are the pound(s) located ?
[11] Is the pound at (location) a tidal or tank system ?
[12] What is the capacity at (location) ?
[13] What do you allow for mortality at (location)?
[14] What is the cost per month to hold the lobster ?
Does this include the cost for mortality ? Y/N (circle)

Location	Type	Capacity	Mort.	Cost

Block 4 - Distribution

[15] Do you use own/ground/air carriers to ship your product to (Boston/NY/LA etc.) ? (Circle own,ground,air)
[16] How much does it cost to ship to (market) using (carrier) excluding customs and duty ? ($/lb)
[17] What are the typical shipment sizes ? (range in lbs.)
[18] At what points do they exit Canada ?
[19] At what point does ownership of the lobster get transferred?
[20] Are you selling to a broker, distributer, or end user ? (Circle B,D,U)

Market	Carrier	Cost	Shipment Sizes	Exit Point	Ownership	Who ?
Boston	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
New York	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
Los Angelos	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U
Europe	Own....Grnd....Air					B..D..U
Japan	Own....Grnd....Air					B..D..U
Central Canada	Own....Grnd....Air					B..D..U
	Own....Grnd....Air					B..D..U

[21] Have you ever tried to sell into other U.S. markets ? Y/N (Circle) Which ones ? (Under "Market" below)
[22] Did you use own/ground/or air carrier? (Circle own,ground,air)
[23] Were you selling to a broker/distr/end user ? (Circle B,D,U)
[24] How much were the shipping costs excluding duty and customs ? ($/lb)
[25] Are you not selling there now due to cost/mortality/transport connections/lack of storage ? (X) What other factors ?

Market	Carrier	Who ?	Cost	Mortal.	Transp.	Storage	Other Factors
	Own....Grnd....Air	B..D..U					
	Own....Grnd....Air	B..D..U					
	Own....Grnd....Air	B..D..U					
	Own....Grnd....Air	B..D..U					
	Own....Grnd....Air	B..D..U					

Block 5 - Marketing

[26] For live/frozen/other lobster products how would you rank the following products in terms of compeition ? (read products/enquire any more)

[27] Do you agree with your buyer on what your competition is (y/n) Comments : _____

[28] Is the new US legislation on lobster sizes going to affect the sales of your live/frozen/other lobster a lot/moderately/not much/not at all or maybe positively ?

Products		Rank
Live Lobster		
	Shrimp	
	Scallops	
	Fr. Tails	
	Surimi	
Frozen Lobster		
	Snow	
	King	
	Surimi	

Response	Live	Frozen	Other
a lot			
moderately			
not much			
not at all			
positively			

[29] I would like to contact some of your buyers could you tell me the firm/contact, and phone number for your major buyers ?

[30] I would like to contact some of your carriers could you tell me the firm/contact, and phone number for your major carriers

Lobster Market Study

Company Name _____ Your Name _____

1. How many supermarkets do you operate ? [ ]

2. What area do you service ? (please check)
- Local [ ]
- State [ ]
- Multi State [ ]
- National [ ]

3. What sales category are you ? (please check)

	Total	Seafood
less than $5 m	[ ]	[ ]
5 - 10 m	[ ]	[ ]
10 - 20 m	[ ]	[ ]
> 20 m	[ ]	[ ]

4. Why do you carry lobster ? (check all that apply)
- requests [ ]
- profitable [ ]
- image maker [ ]
- loss leader [ ]

5. How important is lobster ? (please check one)
- Critical [ ]
- Important [ ]
- Limited [ ]
- Not Important [ ]

6. What type of lobster do you buy ? (check all that apply)
- Live [ ]
- Frozen Meat [ ]
- In Brine [ ]
- Vacuum Pack [ ]
- Frozen Tails [ ]

7. What are you currently paying per lb.? (fill in approx. value)
- Live [$]
- Frozen Meat [$]
- In Brine [$]
- Vacuum Pack [$]
- Frozen Tails [$]

8. What size of live lobster do you buy ? (check all that apply)
- less than 1 lb. [ ]
- 1 - 1.5 lb [ ]
- 1.5 - 2.0 lb [ ]
- 2 - 2.5 lb [ ]
- 2.5 over [ ]

9. How much and how often do you purchase live lobster ? (please fill in)
- Quantity (lbs) [ ]
- Frequency [ ]

10. How have sales of live lobster performed over the last year ? (please check)

		How Much %
Increased	[ ]	[%]
Remained Same	[ ]	[%]
Decreased	[ ]	[%]

11. Do you think this performance will (please check)

		How Much %
Continue	[ ]	
Decline	[ ]	[%]
Increase	[ ]	[%]

12. If lobster prices of a larger or smaller size were to reduce how would this effect your purchasing ? (please check)

	Lobster Price Decrease 5 - 20 %	Lobster Price Decrease 20 - 40 %
Larger Lobster		
Buy Instead	[ ]	[ ]
Buy Also	[ ]	[ ]
No Change	[ ]	[ ]
Smaller Lobster		
Buy Instead	[ ]	[ ]
Buy Also	[ ]	[ ]
No Change	[ ]	[ ]

13. How competative do you feel the following products are with Lobster ?
(please check)

		Highly	Less	Not
Live Lobster Competitors	Shrimp	[ ]	[ ]	[ ]
	Lobster Tails	[ ]	[ ]	[ ]
	King Crab	[ ]	[ ]	[ ]
	Snow Crab	[ ]	[ ]	[ ]
	~~Blue Crab~~ Surimi	[ ]	[ ]	[ ]
	Scallop	[ ]	[ ]	[ ]
	Salmon	[ ]	[ ]	[ ]
Frozen Lobster Meat	Shrimp	[ ]	[ ]	[ ]
	Lobster Tails	[ ]	[ ]	[ ]
	King Crab	[ ]	[ ]	[ ]
	Snow Crab	[ ]	[ ]	[ ]
	~~Blue Crab~~ Surimi	[ ]	[ ]	[ ]
	Scallop	[ ]	[ ]	[ ]
	Salmon	[ ]	[ ]	[ ]
Lobster in Brine or Vacuum	Live Lobster	[ ]	[ ]	[ ]
	Frozen Shrimp	[ ]	[ ]	[ ]
	Frozen Scallop	[ ]	[ ]	[ ]
	Frozen Salmon	[ ]	[ ]	[ ]
	Frozen Crab	[ ]	[ ]	[ ]

14. Do any of the following factors affect how much lobster you purchase ?
(please check)

	Major Factor	Minor Factor	Not A Factor
Lack of Availability	[ ]	[ ]	[ ]
Unstable Pricing	[ ]	[ ]	[ ]
Uncompetative Pricing	[ ]	[ ]	[ ]
Low profit Margins	[ ]	[ ]	[ ]
No Customer Requests	[ ]	[ ]	[ ]
Poor Quality	[ ]	[ ]	[ ]
Lack of Promotion	[ ]	[ ]	[ ]

	Yes	No
15. Do you have instore displays for live lobsters ? (please check)	[ ]	[ ]
16. Do you run lobster promotions ?	[ ]	[ ]

17. How would your lobster purchases change if the prices changed as indicated ?
(please check)

	Purchases Increase	Prices Decreased 5%	15%	25 %	35 %
Live Lobster	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Frozen Lobster Meat	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Lobster In Brine or Vacuum Packed	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]

	Purchases Decrease	Prices Increased 5%	15%	25 %	35 %
Live Lobster	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Frozen Lobster Meat	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Lobster In Brine or Vacuum Packed	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]

	Yes	No
18. Were you aware that the Mitchell Bill passed in the Senate restricting live lobster of less than 1 lb. from being harvested or imported ? (please check)	[ ]	[ ]

19. Will this legislation affect you ?
(please check)

A lot	[ ]
Moderately	[ ]
Not Much	[ ]
Not at all	[ ]

Lobster Market Study

Company Name _____ Your Name _____

1. How many restaurants do you operate ? [ ]

2. What area do you service ? (please check)
- Local [ ]
- State [ ]
- Multi State [ ]
- National [ ]

3. What sales category are you ? (please check)

	Total	Seafood
less than $5 m	[ ]	[ ]
5 - 10 m	[ ]	[ ]
10 - 20 m	[ ]	[ ]
> 20 m	[ ]	[ ]

4. Why do you carry lobster ? (check all that apply)
- requests [ ]
- profitable [ ]
- image maker [ ]
- loss leader [ ]

5. How important is lobster ? (please check one)
- Critical [ ]
- Important [ ]
- Limited [ ]
- Not Important [ ]

6. What type of lobster do you buy ? (check all that apply)
- Live [ ]
- Frozen Meat [ ]
- In Brine [ ]
- Vacuum Pack [ ]
- Frozen Tails [ ]

7. What are you currently paying per lb.? (fill in approx. value)
- Live [$]
- Frozen Meat [$]
- In Brine [$]
- Vacuum Pack [$]
- Frozen Tails [$]

8. What size of live lobster do you buy ? (check all that apply)
- less than 1 lb. [ ]
- 1 - 1.5 lb [ ]
- 1.5 - 2.0 lb [ ]
- 2 - 2.5 lb [ ]
- 2.5 over [ ]

9. How much and how often do you purchase live lobster ? (please fill in)
- Quantity (lbs) [ ]
- Frequency [ ]

10. How have sales of live lobster performed over the last year ? (please check)

		How Much %
Increased	[ ]	[%]
Remained Same	[ ]	[%]
Decreased	[ ]	[%]

11. Do you think this performance will (please check)

		How Much %
Continue	[ ]	
Decline	[ ]	[%]
Increase	[ ]	[%]

12. If lobster prices of a larger or smaller size were to reduce how would this effect your purchasing ? (please check)

	Lobster Price Decrease 5 - 20 %	Lobster Price Decrease 20 - 40 %
Larger Lobster		
Buy Instead	[ ]	[ ]
Buy Also	[ ]	[ ]
No Change	[ ]	[ ]
Smaller Lobster		
Buy Instead	[ ]	[ ]
Buy Also	[ ]	[ ]
No Change	[ ]	[ ]

13. How competative do you feel the following products are with Lobster ?
(please check)

		Highly	Less	Not
Live Lobster Competitors	Shrimp	[ ]	[ ]	[ ]
	Lobster Tails	[ ]	[ ]	[ ]
	King Crab	[ ]	[ ]	[ ]
	Snow Crab	[ ]	[ ]	[ ]
	Blue Crab	[ ]	[ ]	[ ]
	Scallop	[ ]	[ ]	[ ]
	Salmon	[ ]	[ ]	[ ]
Frozen Lobster Meat	Shrimp	[ ]	[ ]	[ ]
	Lobster Tails	[ ]	[ ]	[ ]
	King Crab	[ ]	[ ]	[ ]
	Snow Crab	[ ]	[ ]	[ ]
	~~Blue Crab~~ Surimi	[ ]	[ ]	[ ]
	Scallop	[ ]	[ ]	[ ]
	Salmon	[ ]	[ ]	[ ]
Lobster in Brine or Vacuum	Live Lobster	[ ]	[ ]	[ ]
	Frozen Shrimp	[ ]	[ ]	[ ]
	Frozen Scallop	[ ]	[ ]	[ ]
	Frozen Salmon	[ ]	[ ]	[ ]
	Frozen Crab	[ ]	[ ]	[ ]

14. Do any of the following factors affect how much lobster you purchase ?
(please check)

	Major Factor	Minor Factor	Not A Factor
Lack of Availability	[ ]	[ ]	[ ]
Unstable Pricing	[ ]	[ ]	[ ]
Uncompetative Pricing	[ ]	[ ]	[ ]
Low profit Margins	[ ]	[ ]	[ ]
No Customer Requests	[ ]	[ ]	[ ]
Poor Quality	[ ]	[ ]	[ ]
Lack of Promotion	[ ]	[ ]	[ ]

15. What is your target sales price for lobster lunch and dinner ? (please fill in)

	Lunch	Dinner
Typical Lobster	[ ]	[ ]

16. What is you markup % typically, and for lobster ? [ ] [ ]

17. How would your lobster purchases change if the prices changed as indicated ?
(please check)

	Purchases Increase	Prices Decreased 5%	15%	25 %	35 %
Live Lobster	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Frozen Lobster Meat	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Lobster In Brine or Vacuum Packed	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]

	Purchases Decrease	Prices Increased 5%	15%	25 %	35 %
Live Lobster	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Frozen Lobster Meat	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Lobster In Brine or Vacuum Packed	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]

18. Were you aware that the Mitchell Bill passed in the Senate restricting live lobster of less than 1 lb. from being harvested or imported ?
(please check)

	Yes	No
	[ ]	[ ]

19. Will this legislation affect you ?
(please check)

A lot	[ ]
Moderately	[ ]
Not Much	[ ]
Not at all	[ ]

Lobster Market Study - Distributor/Broker

Company Name _____ Your Name _____

1. What area do you service ? (please check)

Local	[ ]
State	[ ]
Multi State	[ ]
National	[ ]

2. What sales category are you ? (please check)

	Total	Seafood
less than $5 m	[ ]	[ ]
5 - 10 m	[ ]	[ ]
10 - 20 m	[ ]	[ ]
> 20 m	[ ]	[ ]

3. Why do you carry lobster ? (check all that apply)

requests	[ ]
profitable	[ ]
image maker	[ ]
loss leader	[ ]

4. How important is lobster ? (please check one)

Critical	[ ]
Important	[ ]
Limited	[ ]
Not Important	[ ]

5. What type of lobster do you buy ? (check all that apply)

Live	[ ]
Frozen Meat	[ ]
In Brine	[ ]
Vacuum Pack	[ ]
Frozen Tails	[ ]

6. What are you currently paying per lb.? (fill in approx. value)

Live	[$]
Frozen Meat	[$]
In Brine	[$]
Vacuum Pack	[$]
Frozen Tails	[$]

7. What size of live lobster do you buy ? (check all that apply)

less than 1 lb.	[ ]
1 - 1.5 lb	[ ]
1.5 - 2.0 lb	[ ]
2 - 2.5 lb	[ ]
2.5 over	[ ]

8. How much and how often do you purchase live & frozen lobster ? (please fill in)

	Live	Frozen
Quantity (lbs)	[ ]	[ ]
Frequency	[ ]	[ ]

9. How have sales of live lobster performed over the last year ? (please check)

		How Much %
Increased	[ ]	[%]
Remained Same	[ ]	[%]
Decreased	[ ]	[%]

10. Do you think this performance will (please check)

		How Much %
Continue	[ ]	
Decline	[ ]	[%]
Increase	[ ]	[%]

11. Please indicate significant customers for each product.

	Live Lobster			Frozen Lobster				Hot Pack	
	Sm.	Med.	Lrg.	Brine	Vacuum	11.3oz	2 lb	5 oz.	Other
Supermarket	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Fishmarket	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Restaurant	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
White Table	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Dinnerhouse	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Family	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Fast Food	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Other	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

12. How competative do you feel the following products are with Lobster ?
(please check)

		Highly	Less	Not
Live Lobster Competitors	Shrimp	[ ]	[ ]	[ ]
	Lobster Tails	[ ]	[ ]	[ ]
	King Crab	[ ]	[ ]	[ ]
	Snow Crab	[ ]	[ ]	[ ]
	Blue Crab	[ ]	[ ]	[ ]
	Scallop	[ ]	[ ]	[ ]
	Salmon	[ ]	[ ]	[ ]
Frozen Lobster Meat	Shrimp	[ ]	[ ]	[ ]
	Lobster Tails	[ ]	[ ]	[ ]
	King Crab	[ ]	[ ]	[ ]
	Snow Crab	[ ]	[ ]	[ ]
	~~Blue Crab~~ Surimi	[ ]	[ ]	[ ]
	Scallop	[ ]	[ ]	[ ]
	Salmon	[ ]	[ ]	[ ]
Lobster in Brine or Vacuum	Live Lobster	[ ]	[ ]	[ ]
	Frozen Shrimp	[ ]	[ ]	[ ]
	Frozen Scallop	[ ]	[ ]	[ ]
	Frozen Salmon	[ ]	[ ]	[ ]
	Frozen Crab	[ ]	[ ]	[ ]

13. Do any of the following factors affect how much lobster you purchase ?
(please check)

	Major Factor	Minor Factor	Not A Factor
Lack of Availability	[ ]	[ ]	[ ]
Unstable Pricing	[ ]	[ ]	[ ]
Uncompetative Pricing	[ ]	[ ]	[ ]
Low profit Margins	[ ]	[ ]	[ ]
No Customer Requests	[ ]	[ ]	[ ]
Poor Quality	[ ]	[ ]	[ ]
Lack of Promotion	[ ]	[ ]	[ ]

14. How long do you hold live lobster ? 1-5 days [ ] 5-10 days [ ] >10 days [ ]

15. What is the furhterst you would truck live lobster safely ? [ ]

16. How would your lobster purchases change if the prices changed as indicated ?
(please check)

	Purchases Increase	Prices Decreased 5%	15%	25 %	35 %
Live Lobster	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Frozen Lobster Meat	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Lobster In Brine or Vacuum Packed	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]

	Purchases Decrease	Prices Increased 5%	15%	25 %	35 %
Live Lobster	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Frozen Lobster Meat	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]
Lobster In Brine or Vacuum Packed	0%	[ ]	[ ]	[ ]	[ ]
	5 - 15%	[ ]	[ ]	[ ]	[ ]
	15 - 30 %	[ ]	[ ]	[ ]	[ ]

17. Were you aware that the Mitchell Bill passed in the Senate restricting live lobster of less than 1 lb. from being harvested or imported ?
(please check)

Yes [ ] No [ ]

18. Will this legislation affect you ?
(please check)

A lot [ ]
Moderately [ ]
Not Much [ ]
Not at all [ ]

APPENDIX 3

STATISTICS CANADA DEFINITIONS

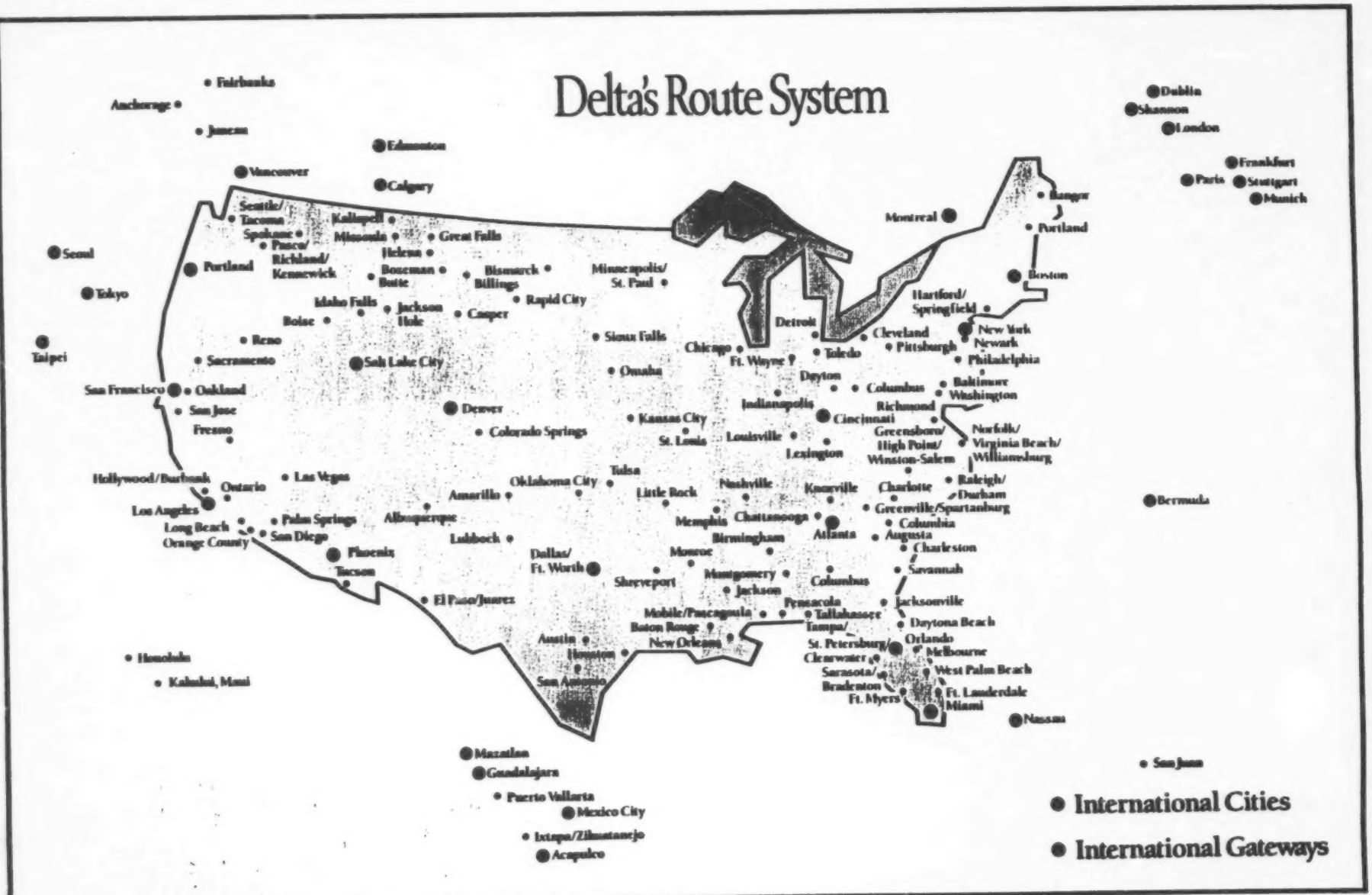
LOBSTER EXPORT DATA

CHANGES TO STATISTICS CANADA DEFINITIONS

Up to 1987 (Incl.)	1988 (Incl.) Onward
.04623 (Live)	.030622-10 (Live)
.04624 (In Shell; Fresh/Frozen)	.030612-10 (Frozen in Brine) .030612-90 (In Shell, Frozen) .030622-90 (In Shell, Not Frozen)
.04626 (Meat, Not Frozen)	.160530-12 (Cooked Meat, Not Frozen)
.04627 (Meat, Frozen)	.160530-11 (Cooked Meat, Frozen)
.04680 (Canned)	.160530-91 (In Airtight Containers) .160530-92 (Not In Airtight Containers)

APPENDIX 4

DELTA AIRLINE MAP


Delta's Route System
Fairbanks
Anchorage
Juneau
Edmonton
Vancouver
Calgary
Seattle/
Tacoma
Kalispell
Spokane
Missoula
Great Falls
Pasco/
Richland/
Kennewick
Helena
Seoul
Portland
Bozeman
Butte
Bismarck
Billings
Minneapolis/
St. Paul
Tokyo
Idaho Falls
Jackson
Hole
Casper
Rapid City
Boise
Taipei
Reno
Sioux Falls
Sacramento
Salt Lake City
Omaha
San Francisco
Oakland
San Jose
Fresno
Denver
Colorado Springs
Kansas City
St. Louis
Hollywood/Burbank
Ontario
Las Vegas
Los Angeles
Long Beach
Orange County
Palm Springs
San Diego
Albuquerque
Amarillo
Oklahoma City
Tulsa
Little Rock
Lubbock
Phoenix
Tucson
El Paso/Juarez
Dallas/
Ft. Worth
Shreveport
Monroe
Memphis
Nashville
Louisville
Lexington
Knoxville
Chattanooga
Birmingham
Atlanta
Charlotte
Raleigh/
Durham
Greenville/Spartanburg
Columbia
Augusta
Charleston
Savannah
Columbus
Jackson
Mobile/Pascagoula
Pensacola
Tallahassee
Jacksonville
Daytona Beach
Baton Rouge
New Orleans
Tampa/
St. Petersburg/
Clearwater
Orlando
Melbourne
Austin
Houston
San Antonio
Sarasota/
Bradenton
Ft. Myers
West Palm Beach
Ft. Lauderdale
Miami
Nassau
Honolulu
Kahului, Maui
Mazatlan
Guadalajara
Puerto Vallarta
Mexico City
Ixtapa/Zihuatanejo
Acapulco
Detroit
Chicago
Ft. Wayne
Toledo
Cleveland
Pittsburgh
Hartford/
Springfield
New York
Newark
Philadelphia
Baltimore
Washington
Dayton
Columbus
Indianapolis
Cincinnati
Richmond
Greensboro/
High Point/
Winston-Salem
Norfolk/
Virginia Beach/
Williamsburg
Montreal
Bangor
Portland
Boston
Dublin
Shannon
London
Frankfurt
Paris
Stuttgart
Munich
Bermuda
San Juan
International Cities
International Gateways

APPENDIX 5

MINIMUM SIZE REGULATIONS

U.S. Carapace Size Regulations

Jurisdiction	Effective Date	Minimum Size
Federal plus	Current	3 1/4" (82.6 mm)
Massachusetts, Maine	January 1, 1991	3 9/32" (83.3 mm)
Rhode Island	January 1, 1992	3 5/16" (84.1 mm)
New York	Current	3 1/4"
Connecticut	January 1, 1992	3 9/32"
	January 1, 1992	3 5/16"
New Hampshire	Current	3 1/4"
North Carolina		
New Jersey, Maryland	Current	3 3/16" (81.0 mm)
Delaware, Virginia		

Source: External Affairs and International Trade Canada

Note: - Massachusetts and Rhode Island have exemptions for lobster in transit through the state.
- Federal applies to live only; Massachusetts, New Hampshire, Rhode Island specifically include live, dead, cooked, uncooked.